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ABSTRACT

This document contains the participants list, agenda, and six papers from a seminar on the role of the company in lifelong learning in the European Union. "Introductory Comment: The Role of the Company in Lifelong Learning" (Jacques Delcourt) traces the movement from training for life toward flexible training systems coupled with flexible work and organization systems. Problems arising during the transition from traditional job-training systems to the new focus on continuous training are discussed in "Paradoxes and Pitfalls in Strategies of Continuous Training" (Peer H. Kristensen). "The Risks and Opportunities of Learning on the Job" (Edgar Sauter) explores the objectives, advantages, and characteristics of work-integrated learning. The tasks and principles underpinning France's training system are reviewed in "French Training System: Reflections" (Alain Dumont). "Continuous Training: 'A Conflict and a Solution'" (Blanca Gomez) argues that, in Spain and elsewhere, developing a successful system of continuing training requires dialogue at the firm, sectoral, regional, national, and European levels. "Conclusions and the Debate So Far" (Jacques Delcourt, Jordi Planas) reviews trends and countertrends in training and considers the effects that economic realities and workers' expectations and demands have on the way employers define their training role. Several papers include substantial bibliographies. (MN)

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CEDEFOP panorama

ED 425 330

AGORA — II
'The role of the company in lifelong learning'

Thessaloniki,
17 and 18 November 1997

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CE 077 704

Seminar

CEDEFOP panorama

AGORA — II
'The role of the company in lifelong learning'

Thessaloniki,
17 and 18 November 1997

Jordi Planas
Project coordinator, CEDEFOP

Thessaloniki 1998

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Seminar

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FOREWORD

This publication is the outcome of the discussions held during the second seminar of the CEDEFOP "AGORA THESSALONIKIS" programme.

What is the AGORA THESSALONIKIS?

In ancient Greek the word AGORA means the market-place or square where matters of public concern are discussed. In creating the AGORA THESSALONIKIS, CEDEFOP wants to reflect this idea.

The main aim of the AGORA THESSALONIKIS is to create a forum for open, multilateral discussion providing technical and scientific support for the decisions and negotiations on vocational training which involve the various partners (Commission, and social and governmental partners) within Europe.

CEDEFOP acts as an interface between research, policies and practice, in order to provide the Commission and the social and governmental partners with a clearer understanding of changes in vocational training within the EU countries, thus putting them in a better position to take decisions. CEDEFOP also aims to encourage scientists and researchers to identify and promote the areas of research of greatest importance to those whose job it is to decide on questions of vocational training.

An interface between research and decision-making, need not provide direct, practical support on specific decisions, but rather, use the results obtained from research and the academic world and interpret them in order to provide possible solutions to the main problems raised by the partners thus, supplying the partners with the information which will enable them to take their own decisions.

Content:

The theme of the seminar was: "The role of the company in lifelong learning".

The introduction to the seminar was based on the results of a CEDEFOP study on nine EU countries, conducted by Professor Philippe Mehaut (GREE - University of Nancy) and Professor Jacques Delcourt (University of Louvain-la-Neuve)

The debate focused on the main issues which the results of this research raise in defining the role of the company in generating qualifications. The aim was to make the strategies of the various players (individuals, companies and governments) both feasible and effective when it comes to lifelong training paths. This debate should be widened to include input from a wider spectrum of research.

The reference research aims to better identify the position of the company in generating qualifications especially by examining the training impact of work organisation. The results of this research show that the changes observed do have major effects on existing characteristics and rules in training and work relations. This raises a number of issues for decision-makers, not only with respect to public training policies and company training policies but also for labour policies - how the labour-market, the systems of work relations and the social dialogue work.

As training becomes a lifelong process it raises new challenges for the company. On the one hand, the importance of its role in generating qualifications and skills is increasing; on the other, because of the greater flexibility and externalization of labour markets, the passage between different jobs raises above all the question of the recognition of the qualifications and skills acquired, in a formal and informal manner, within or via the company. Finally the creation of new links between initial training and continuing training and between these two and informal training also occur at company level.

The role of the company in lifelong learning, therefore, involves identifying company needs, evaluating the potential and shortcomings of the workforce, guiding assisting staff in their choice of training, evaluating of training and trainers, certifying of achievements, etc.

All these related functions are essential when the objective is to improve the efficiency of training programmes and systems within the company by means of greater adaptability and flexibility.

Several questions are raised concerning the role of the company and its environment. Should companies provide training for specific groups in the workforce? Must they ensure that there are exchanges of knowledge in order to arouse collective intelligence which is essential for the development of a company's skills?

These results are of great interest for the two sides of industry and for those responsible for public training/education policies. CEDEFOP, therefore, proposes an open debate on this subject, aiming to identify the future elements which might be derived from it, to be conducted between the two sides of industry, politicians and research scientists.

Discussions developed from an introductory memo which is attached to this booklet. It was drafted on the basis of the CEDEFOP survey, under the responsibility of Professor Jacques Delcourt, co-director of the project.

During the introduction, the other invited experts gave their opinions on the questions up for discussion, in order to provide an overview of the various approaches to the subject. Their presentations, drafted after the discussions, are also included in this brochure under the following titles:

Paradoxes and pitfalls in strategies of continuous training
Peer H. Kristensen
(Copenhagen Business School Institut for Organisation og Arbejdssociologi
Köbenhavn, Denmark)

The risks and opportunities of learning on the job
Edgar Sauter
(B.I.B.B. - Bundesinstitut für Berufsbildung Berlin, Deutschland)

French training system: reflections
Alain Dumont
(CNPF - Conseil National du Patronat Français - Direction de la Formation - Paris, France)

Continuing training: "A conflict and a solution"
Blanca Gomez
(CC.OO - Comisiones Obreras - Secretaria de Formación, Madrid, España)

Finally, the last chapter of this booklet, which is entitled "Conclusions and the debate so far", aims at summing up the discussions which took place during the sessions of the seminar. Professor Jacques Delcourt and I wrote this chapter and we bear full responsibility for its limitations or any errors it may contain.

Jordi Planas
Organizer of AGORA THESSALONIKIS

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CEDEFOP

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VAN RENS Johan

AGENDA OF THE SEMINAR

Monday 17 November 1997

09.00 - 09.30	Welcome and opening of the seminar by Mr. Johan van Rens, Director of CEDEFOP.
09.30 - 10.00	Introductory paper by Mr. Jacques Delcourt.
10.00 - 11.00	Presentation of "statements for discussion" by: Mr. Edgar Sauter (B.I.B.B., Germany) Mrs Blanca Gomez (CC.OO., Spain) Mr. Peer H. Kristensen (Handelshöjskolen I Köbenhavn, Denmark) Mr. Alain Dumont (CNPF, France)
11.00 - 11.15	Coffee break
11.15 - 12.00	General discussion
12.00 - 12.30	1st round table - The employers' point of view: Mr. Philippe Dufoin (Fédération des Fabrications Métalliques, Belgium) Mr. Agustin Del Pino (Dragados y Construcciones, Spain) Mr. Reinhold Weiss (Institut der Deutschen Wirtschaft, Germany)
12.30 - 13.30	General discussion
13.30 - 15.00	Lunch: buffet
15.00 - 15.30	2nd round table - Trade Union point of view: Mr. Jean Daems (Mouvement Ouvrier Chrétien, Belgium) Mrs Manuela Teixeira (UGT, Portugal) Mr. Petros Linardos-Rylmon (INE, Greece)
15.30 - 17.00	General discussion
21.00	Dinner provided by CEDEFOP at the hotel Philippion

Tuesday 18 November 1997

09.00 - 09.30	3rd round table - The key issues for the future for cooperation between companies and education and training systems Mr. Uwe Grünewald (B.I.B.B., Germany) Mr. Valeriano Muñoz (Consejo Superior de Camaras de Comercio, industria y Navigacion, Spain) Mr. Heikki Suomalainen (Confederation of Finnish Industry and Employers, Finland)
09.30 - 11.00	General discussion
11.00 - 11.45	Coffee break
11.45 - 12.30	Final remarks: summing up and reflections by Mr. Jacques Delcourt and Mr. Jordi Planas.

INTRODUCTORY COMMENT:

THE ROLE OF THE COMPANY IN LIFELONG LEARNING

JACQUES DELCOURT

1. Short historical reminder

This introductory memo to the second seminar (AGORA THESSALONIKIS) is part of the further work in connection with the "synthesis report" published by CEDEFOP in May 1994 entitled, "The role of the company in lifelong learning: the training impact of work organisation".

The study aimed to identify the processes by means of which companies develop the qualifications of operatives in response to changes in work organisation and its management. Forty seven companies or company units in the European Union were analysed. In several cases, changes in work organisation and in the companies themselves were preceded or followed by downsizing of the workforce. Sometimes, the changes led to closures, to relocation or regrouping of company units. There were also cases in which the organisational changes were accompanied by substitutions between different categories of operatives: women replacing men or the more highly skilled replacing the less highly skilled but there were also some movements in the opposite direction.

Besides examining what were often negative effects on employment, the research aimed above all to identify the way in which cognitive, operational and social skills were affected positively or negatively by reorganisation.

In the course of this research, material was collected which raises questions concerning the need for companies to act as trainers, and the limits observed to this role, the continuity of efforts required as a consequence of growing competition but also the ever faster pace of change and the increasingly complex nature of economies.

This study has shown how training leading to a qualification in the company develops in a formal and discreet manner in parallel to changes in the organisation and the search for competitive innovations.

The "synthesis report" shows how companies handle, each in their own way, their role as trainers firstly because they are diverse and manifold but also because they define in a very different manner their need for apprenticeship and their training goals, because their concepts differ concerning the ways in which training should be organised both inside and outside the company and also about the necessary length.

Finally, if the pursuit of competitiveness is the driving force behind the development of training, at the same time this pursuit throws light on the limits to the role which the company can play in lifelong training.

2. The diversity of companies: a challenge to be taken up in the shaping of their training role

Undoubtedly, companies differ in the way in which they assume their training role. Each company is a separate and complex entity. Each company has different links with suppliers, subcontractors, its employees, distributors and clients. Not only the companies themselves are diverse but following the emergence of corporate networks, it may be the case that people no longer know where their boundaries are. Today, companies are involved in a whole range of alliances, contracts, partnerships with subcontractors, state-owned companies, authorised dealers, franchisees. All this affects the way in which companies perceive and assume their training role.

Furthermore, companies may be small, medium-sized or large. Some of them are in a monopoly situation, others operate in a sector protected from competition. Others, by contrast, are fully exposed. Some focus on exports, others on the domestic market. Some are situated in relatively stable sectors, others operate in a turbulent economic and technological environment. Some of them head their field in terms of research and development. Others are happy to purchase technologies, patents and software. Some companies are simply managerial, others work on the basis of orders, some as subcontractors, others are entrepreneurs. Some are national, others multinational. Some are integrated, multiskilled, more or less independent. Others specialise in a product, a technology, a function or a service. Hence, the companies are as diverse as their respective philosophies. It is quite normal for each one of them to develop in line with the changes in its specific context or environment.

Last but not least some companies have to deal with one or more trade union organisations, which do not necessarily share the same goals. Some are focused more on control, others on participation. However, there are also companies who are not exposed to trade union pressure.

Hence, the training role of the company is going to develop very differently from one company to another, both in terms of the transformations which that company experiences or triggers in its internal or external structure as well as in line with the competencies and resources which it has at its disposal in terms of information and continuing training of its workforce.

Irrespective of the diversity of companies, they are all - in one way or another - exposed to changes in the environment, markets and competition. All are subject to competitiveness, to the dictates of adaptability and innovation. Hence, any company seeking to be innovative and the leader in its field must motivate its workforce and provide training for them. It must adapt and shape its workers in a continuous manner and, in this way, play a role in lifelong training.

3. The effects of permanent competition

In the medium term, in the face of competition which is developing on the local, regional, continental and global levels, the only comparative advantage for companies, nations and states in isolation or grouped together lies in innovation and, by extension, in the qualification of their workforce. With the opening up and liberalisation of markets, competition is spreading to all industrial and service sectors and affects performance in all

areas and functions of the company whether they be procurement, production or marketing.

Henceforth, the competitive advantage of European countries will lie in innovation, in the creative and innovative capacity of companies, in knowledge, aesthetics, product culture, in the intelligence integrated into processes, equipment and functions of the company, in the skills to be continuously transformed into products and in improving, in an ongoing manner, the processes and functions of production and organisation and, therefore, in also improving continuously the quality of human resources, by promoting their mobility, flexibility, adaptability and creativity. This does not mean that all companies are going to embark on one and the same course like a comet with its tail.

3.1. Fine tuning and design of products

The first effect of competition is to focus the attention of companies on markets and clients, on a commercial rationale which means shortening production and supply deadlines and providing through customer services, orientation towards elaborate, sophisticated production and products whose quality, reliability and safety it confirms and whose design and style it can promote.

Competition encourages product innovation and the continuous renewal of ranges in line with a growing number of increasingly strict standards concerning quality, safety and hygiene.

3.2. Sophisticated technologies

The second effect of competition is shown in the process of production and in the fine tuning of the industrial rationale. It forces companies to search for reliability and flexibility in what are often complex technological processes and to develop the capacity to quickly program and reprogram them in line with demand, and to seek out preferred options as well as innovations.

3.3. Desegmentation and integration of functions

In third place, competition encourages a desegmentation of functions and their dynamic integration. There is increased interdependence between the procurement, production and marketing functions on behalf of just-in-time production without any stocks. Furthermore, competition encourages links between these production functions and those situated upstream such as design, research and training development. In order to face the complexity of the problems, bilateral and functional interdependencies are, therefore, necessary within the company at first but also with the outside world since companies are integrated into increasingly dense networks.

3.4. The organisation of a total and continuous process of innovation

The effects of competition do not stop there. Besides the speed of reprogramming production and work circuits, competition affects the time required for innovation, the time required to develop new products and new models in respect of the design of new production and organisation modes and, hence, also the time needed to create new

qualifications, to implement new apprenticeship and training methods and, in parallel, to shape new corporate philosophies.

As Marc Giget shows, in the face of competition, companies can only become innovative in an ongoing or permanent manner by inventing strategies for "total innovation". This means turning the company into a cognitive and practical system for the benefit of innovation, by creating a system of dynamic interaction between the various functions and forms of expertise, between the functions of research and development, production, marketing, financial management but also adapting and developing human resources.

Hence, under the impact of competition there is a move from productions and economies based on low levels of qualification to sophisticated production, to the manufacturing of increasingly complex products (goods and services), to the design of increasingly sophisticated products which incorporate know-how, science, technology and culture, to production units requiring state-of-the-art technologies also in terms of information and communication and, by extension, knowledge and know-how.

4. Innovation: a process for the creation/destruction and upgrading/ downgrading of qualifications

In the CEDEFOP synthesis report of May 1994, the innovative and learning company is characterised by:

- The multiskills of its workers made necessary by the move from a rigid to a flexible definition of tasks;
- The desegmentation between the shop floor and offices;
- The growing importance of horizontal relations compared with hierarchical relations as functional links increasingly become strategic ones;
- The development of participation and the widening of responsibilities linked to a work post or function;
- The pursuit of innovation versus repetition.

An innovative and learning company offers its workers an opportunity to contribute in an ongoing manner to changes and to development. At the same time, it also offers them recurring and alternating sequences of apprenticeship and training.

From the workers' point of view, this focus on innovation, aside from its overly negative effects on employment, calls for apprenticeship training and qualification efforts. Indeed, if we follow Joseph Schumpeter, the process of innovation is a process of creative destruction, also in terms of qualifications. It involves both a downgrading of traditional qualifications, the liquidation of the conditions for the use of a whole range of workers' knowledge and skills and, at the same time, the upgrading of information, knowledge, competencies and new professional practices and qualities such as adaptability, multiskilling and flexibility of workers.

However, the need for lifelong training is not justified solely by the speeding up of economic, scientific and technological change. Demographic developments and, more particularly, the accelerated ageing of populations in Europe are another important argument.

5. The ageing of the working population in Europe

Within the European Union, the ageing of the working population is an alarming development even if it has not attracted very much attention. The ageing of human resources who work for public and private companies results not only from the freeze on recruitment since the crisis in 1973. It can principally be explained by the drop in the birth-rate registered since 1965.

Since roughly 1985, low birth-rate age groups are entering the world of work. Against this backdrop, the proportion of the active population aged 55 and more is growing compared with younger generations. This observation applies to the two sexes even if the employment rates of women aged 45 and over are lower than those of their masculine peers.

In the years to come, we cannot hope to replace ageing generations at work by an inflow of young generations.

Consequently, we will have to find the means of maintaining or increasing the productivity of ageing generations to the same level held by young generations who are more highly educated but less numerous. A policy of lifelong training should be envisaged very soon if we don't very quickly want to find ourselves handicapped by the obsolescence and downgrading of the knowledge and skills of older generations. Nowadays, changes force older workers out of the work circuits which increases the volume of the unemployment benefits and early retirement benefits which have to be paid. At all events, whether a decision is taken to offer training or lay off workers and to send older workers into early retirement, the expenses to be borne compete with the expenses for training young people entering employment. A kind of arbitration is necessary between the young and less young generations with a view to optimising investment in training.

6. In the pursuit of modalities for developing collective competencies

Companies who wish to be innovative cannot merely develop intelligence and individual competencies. The continuous pursuit of quality in products as well as a total innovation strategy imply, moreover, the development of collective intelligence.

A modern company is less of a pyramid in shape; it is more horizontal, focused above all on the market, on the quality of products, on the quality of services aiming to satisfy diverse categories of clients and providing just-in-time deliveries. It also focuses on developing innovation. Hence, the modern company is involved in a network of interdependencies reinforced by the creation of a multiplicity of internal and external networks for the simultaneous management of physical flows (materials and products) and non-material flows (information and ideas). It is by means of this multiplicity of networks that a company moves away from segmentation and finds itself able to better manage the functional interdependencies which are becoming increasingly dense.

But a company of this kind, which is at the same time networked, innovative and proactive, cannot exist without mobilising and developing collective intelligence or without enhancing, in addition to the intelligence of human resources, the intelligence of groups and work communities.

Collective intelligence develops by means of the interfacing of know how thanks to intellectual trailblazing, and by the hybridisation of knowledge, disciplines and cultures. A

company can only become an innovative and learning organisation if it generates rules, circles, groups and practices which are likely to contribute to the development of collective intelligence. As in the case of individual intelligence, collective intelligence can only develop if the acquisition, storing, processing, distribution and utilisation of information and ideas are guaranteed.

Today, company productivity and competitiveness depend not only on the man-machine relationship but increasingly on the fine tuning between humans, between working groups, between the shop floor and offices, between design and production functions and between project and work groups.

7. From training for life towards lifelong training: a new challenge for companies and employees

If there is a desire to face up to successive changes triggered by increasingly stiff competition in economic, organisational, technical, scientific, communicational and cultural areas, vocational training must become ongoing and be extended to people's entire working lives and even to their entire lives because the updating of know-how is not something which only concerns manufacturers and workers but also consumers. From training which was hoped to be enough for the rest of people's lives, we have to move to a system of lifelong training. Hence the question about the role which the company could play in this context.

Nowadays, a company wishing to remain effective, despite the successive changes triggered by competition, must develop its entrepreneurial capacity and become innovative in a continuous manner. It must, therefore, also become a learning environment. This implies that it must transfer as well as produce information, knowledge and competencies in line with the ongoing innovations which it is exposed to or produces itself.

Logically, on the basis of the preceding arguments, "lifelong training" seems to be an essential initiative and a role which companies must adopt even if they decide not to undertake this task themselves but to assign it to other outside bodies. They will then assume responsibility for setting up and reviewing, in an ongoing manner, what has been agreed in terms of training provision.

If companies are interested in lifelong training, this objective is particularly appealing to operatives and workers in the company. In fact, having undergone better basic training thanks to compulsory schooling and the prolongation of that schooling, stimulated by the changes which they continually face at work and in their daily life, and worried by the increase in unemployment, the growth in long-term unemployment and forced retirement, workers are relatively spontaneously in favour of updating their knowledge and occupational competencies. In the same way they cannot be anything other than happy if they undergo occupational retraining, the costs of which are borne by the company. Anxious to climb the career ladder, the more highly skilled operatives are happy to attend supplementary training which will smooth their path to promotion.

However, although workers and employers may agree on the need for recurring training or even continuous training, it is not certain that their objectives will coincide and that the means which they envisage to this end will be identical.

8. In pursuit of harmony in the goals of employees and companies

In a world which is constantly changing, in an era in which in less than half a century we have moved from industrial economies to service economies or even more quickly to information, communication, leisure and culture societies, it is understandable that the various players, be they companies or workers, are interested in the ongoing updating of their knowledge and skills. But this does not mean that their goals will spontaneously coincide.

Firstly, the company does not have a lifelong contract with its workers. The workers, in turn, do not feel themselves to be tied to a company for their entire working lives even if the company does agree to provide generous training for them. Their goal is to get away as soon as they can. Hence, investment in training continues to be a risk for the company particularly as the knowledge and skills acquired are not specific to the company and can, therefore, be transferred to other companies.

Furthermore, the company most frequently is looking to improve short-term performance. It may, therefore, feel itself to be handicapped by the fact that the return on apprenticeship or training financed by it, whether inside or outside the company, is not immediate or an automatic guarantee.

Inversely, even if the worker wishes to have a right to training, the training effort required of him by the company may appear to him as a constraint if not a test, a challenge to be taken up or may even involve costs for example when he has to do his apprenticeship or training outside working hours or bear some or all of the costs.

Everything also depends on the way in which he experiences the need to adapt his know-how or to undergo retraining or even in the way in which he sees his chances of promotion.

Finally, the company may not necessarily suggest that he learns what corresponds to his apprenticeship and training abilities or which best meets his aspirations or his desire to experience or learn. Against this backdrop, a company can only maintain its performance by pooling or extending the knowledge and individual or collective skills of its workforce if it finds the means to motivate workers vis-à-vis its goals and to search out paths for sufficient congruence between its strategic goals and those of its workers - be they individuals or groups.

Under these conditions, we can see that lifelong training becomes a challenge and opens up a new area for negotiation, for alliances and compromises between the traditional social partners (the producers, the workers and their representatives) but also between new players such as trainers and the institutions actively involved in initial vocational education and training, retraining and the promotion of adults.

9. Towards flexible training systems coupled with flexible work and organisation systems

By placing an information circuit thanks to information and communication technologies alongside the production circuit, companies can increase their flexibility and performance. Furthermore, in order to beat the competition, they are increasingly placing their bets on innovation. Against this backdrop, it is for them a matter of encouraging the mobility, adaptability, flexibility and creativity of workers and of going one step further by means of

creating awareness and asking them to assume responsibility for the quality of work, for products, customer services and market laws. This explains the extension of the company's training role. This training and this mobilisation are all the more obvious since the pursuit of these goals is frequently accompanied by downsizing of the workforce.

However, this observation does not inform us about the diverse nature of the processes by means of which companies assume or are going to assume this role in parallel, in co-operation or in competition with other institutions.

In advanced societies, the information and communication technologies which transform the systems of production and organisation, also bring about changes in education and training systems and, by extension, in the transmission of knowledge and competencies developed within companies outside these systems.

As far as the companies are concerned, these new technologies constantly change and diversify the ways in which they can develop their training role and, by consequence, promote the flexibility of production and qualification systems.

But these technologies which radically overthrow the training role of the company, also revolutionise the role of other training bodies. Nowadays, we are witnessing a diversification of the channels and forms of access to information and knowledge. We can see a multiplication of the sources, be they near at hand or further away, which are accessible by the Internet, for example, and of distance learning. Individuals' independence is, therefore, reinforced in the choice both of the goals and the methods of apprenticeship and training. Whether they are looking to inform or train themselves, workers are no longer solely dependent on their companies. This has a knock-on effect on the way in which the company perceives and fulfils its role in lifelong training.

So far, education and training schemes have seemed to be somewhat rigid. They were presented in the form of programmes, catalogues of subjects to be assimilated in line with methods and pre-coded exercises and in line with specific sequences and periods of pre-established classes. The programmes were moulded into standardised shapes in the same way as mass production.

Today, "made to measure", "variable geometric" and "flexible time" programmes appear alongside routine and standardised programmes. The programmes are flexible because they are adaptable to new and changing demands, because they are increasingly focused on solving problems and on the client, whether this be a company, occupational, transversal, trans-departmental, transfunctional or transhierarchic group, project group or quality circle. Programmes of this kind are normally based on current alliances or ad hoc twinning between educational institutions, research centres, training bodies and experts both within and outside the company.

Nowadays, the flexibility of programmes can be taken as far as making them customised and providing back-up for the individual in a learning situation. This begins with an analysis of his stock of competencies and an evaluation of his assets or shortcomings and his desired orientation and occupational objectives.

In some cases, the whole idea of a programme is thrown overboard, for instance when the company decides, in isolation or along with others, to promote self-training by creating training sites which are easily and freely accessible and which are equipped with the most high performance teaching aids, apprenticeship software, educational software and training equipment. Other companies encourage "learning by doing or by using", for example, by giving operatives PCs which they may use at home.

But these developments in the systems of apprenticeship and training do not just affect companies and workers. They also affect and are of interest to all the institutions involved in initial and continuing training. They also involve public authorities and, more particularly, the ministries of labour, employment and education as well as European bodies.

Hence, a global system of apprenticeship and training is emerging which bypasses the monopolies which, in the course of time, have been set-up and institutionalised in these areas. They range from the institutions formally mandated in terms of schooling and training, including companies, polytechnics and universities, to the bodies responsible for the recognition and monitoring of programmes in schools and for the nomination and control of teachers, trainers, school inspectors and training centres. Amongst these bodies we must also include those normally responsible for the certification of the acquisition of knowledge and competencies and for homologating diplomas.

The emergence and the expansion of a large training market, in addition to the traditional institutions, can be explained by the growth of cultural industries, numerous transnational multimedia companies, by the extension of merchandising, the industrialisation of culture and also by the transmission of knowledge and apprenticeship techniques.

10. The social implications of change for production and training systems

The changes which have taken place during this century have transformed agricultural societies first into industrial societies, then into more "service-oriented" societies, and more rapidly still, into information and cultural societies. The scientific, technical and economic changes as well as changes in information and communication have completely overturned occupational structures and have led to a continuous stiffening of the requirements which have to be met in order to access the labour market, trades and occupations. They have also led to sweeping changes in the way in which the labour market and occupational pyramids function by imposing an updating of knowledge and competencies in response to the raising of the thresholds which have to be successively crossed in the course of working life.

Today, changes in sciences and technologies but, above all, in information and communication have profoundly transformed organisational processes and structures. Multiskilling, flexibility and mobility are now the order of the day. The horizontal and vertical enhancement of work, the desegmentation of hierarchical levels and of functions and departments modify the range of operational, intellectual and behavioural skills mobilised by organisations. The combinations of skills are increasing ad infinitum.

All these developments sow confusion in classifications, segments and traditional occupational classifications. They cloud the frontiers established by the social partners between trades, occupations and cannot but lead to new problems when it comes to applying salary scales and the corresponding barometers. They overturn the wisely established divisions between various disciplines and practices. At the same time, they increase the number of occupational adaptation or re-adaptation sequences essential for any worker who wants to keep his job. They increase the number of people undergoing retraining. All this contributes to throwing guilds and sectorial trade unions into a state of confusion since they are anyway hesitating between traditional and new demands.

These scientific, technical, economic and organisational upheavals do not just create adaptation problems for companies. The growth in individual or collective dismissals raises the number of people excluded from work and the labour market. This, in turn, increases the expenditure necessary in schools, on training programmes and on occupational apprenticeships both inside and outside companies. This increases the efforts to be made by the players and competent bodies when it comes to constructing or reconstructing in a permanent manner the qualifications and occupational pyramids in an innovative economy which sociologists describe as an economy of distinction and seduction, of information and communication, of consumption, leisure and culture.

Hence, beyond the challenges facing small, medium-sized or large companies when it comes to organising lifelong training, developing logistic functions (such as information, counselling, orientation and longitudinal back-up for workers in occupational adjustment, transition or retraining both within and outside the company by means of "out placement" for example), there are many other challenges on the social level for the public authorities, governments and even European bodies. Hence, it is a good thing that lifelong training and the right to training throughout working life are becoming strategic challenges for workers and those who represent them. This also makes them challenges for the social partners who, what's more, are increasingly debating and negotiating on the European level. This training and the right to training are an essential asset in the redevelopment of employment and in the battle against fragmentation, or even dualisation of European societies.

11. Questions for a debate

❑ **Lifelong training interests workers but does it also interest employers?** How do they endeavour to identify short and long-term training needs? **Do all companies have a role to play in lifelong training?** Will they assume this role irrespective of their size: large, medium or small? or of their integration into a company network? Do they not expect training to be provided by the suppliers of equipment, by sponsors? or other external bodies?

❑ **When companies assume this training role, is it for all categories:** for the less highly skilled, for part-time workers, young people, older employees, women, migrant workers, teleworkers...?

❑ From the company angle, training is a cost, an expenditure which is all the higher since it also includes, aside from training plans, a series of supplementary factors such as information, guidance and back-up for the workers who are to receive training. **The company's assumption of the training role implies an assessment of the costs and benefits but also of the risks.** In fact, the worker may not do well in training. The training received may not have a direct effect. The effects may not be sufficiently long term when the workers is already relatively old. He may also choose to put this training to use elsewhere particularly if the knowledge acquired can be transferred to other companies or he may ask for a higher salary.

Under these conditions, would it not be better to wait for other companies to take this risk, or even to pinch their trained employees when the need arises? Or, if countries plan to offer lifelong training then under what circumstances? In which areas? since companies do not attribute the same degree of importance to all areas?

With what kind of contracts: short or long-term? **On the basis of what kind of incentive?** With what kind of time or financial contribution by the employee?

❑ **Does not lifelong training imply financing the worker rather than the company? Should not the right to training be developed in order to force the company to take part in a flexible system of lifelong training and to promote opportunities for learning and experimenting?**

❑ Nowadays, several factors force companies and corporate networks to promote creativity and innovation. **What is the effect of the pursuit of innovation on the training role of the company? What effects does it have on the modalities for recruiting employees, their training and promotion?** Is it true that companies recruit people with diplomas and qualifications beyond their needs because at a later stage this will smooth the path to adaptability and flexibility of operatives? Does this permit the company to meet its training role more effectively? What is the effect of the ability to learn and of apprenticeship on the determination of salaries and the granting of promotion? Are these different ways of encouraging training?

❑ When it is said that companies want to be training venues, **what does the word training actually mean?** They train by means of work, by learning by doing, by accumulating experience, by trial, error and success, by exchanges of know-how amongst workers, by networks of work relations, by resolving problems, by participating in discussion groups, quality circles, and project groups. But will this mean that all companies will offer training and this on a lifelong basis? Furthermore, if a major share of continuing training is done "on the spot", is there not a risk of discrimination amongst workers on the lowest level and operatives on a higher level who are entitled more frequently to formal training sessions?

Doesn't lifelong training first involve explicit training? And therefore a longer-term strategy coupled with anticipation? Elaborated how and by whom?

Doesn't lifelong training require clearer interdependence between tacit and informal training and explicit training?

Should not sequences of standardised and routine training be better linked to sequences aiming to identify and mobilise implicit competencies (where training does not depend only on companies but also on the various bodies in which workers are integrated) **as well as collective competencies: all the competencies which are not really suitable for programmed and standardised training programmes?**

❑ The training goals of companies do not necessarily correspond to the training and career goals of workers. **How do companies endeavour to develop a consensus between their goals and the goals of the various categories of workers?**

Are not the creation of self-training areas, of "learning by doing or by using", and the provision of information and equipment, free access to diverse sources or databases of information and training from within the company all ways of promoting this consensus both in the short and long-term?

❑ Whether in the field of the flexible organisation of work, production or management technologies used in companies, there is a division on the one hand between the conditions of school and initial vocational training and, on the other, the conditions for the

functioning of companies. But there are also divisions between the conditions of training and research in higher education institutions and companies. **Don't efforts to overcome these divisions call for new alliances between the respective representatives of production and training systems? Do we not have to draw up new links and new synergies between schools, initial and continuing, individual and collective training bodies, distance learning participants, multimedia producers and, what's more, companies? Do not rapprochements of this kind need incentives? Negotiations? Management, coordination and control bodies?**

❑ From the point of view of the workers, the certification of knowledge, competencies and experience acquired is a key issue. It facilitates mobility on the labour market and enhances the fluidity of that market. As such, the company is not interested in developing workers' mobility unless it wants to get rid of one or more workers.

How, parallel to the development in lifelong training, can a certification of knowledge be guaranteed? Is it enough to ask the institution for a list of competencies? Must the company be obliged to do this or should this role be assumed by an official body in cooperation with the Ministries of Education, Employment and Labour?

❑ **What role should be reserved for collective bargaining and for the social partners in the development of the right to initial and continuing training whether this be on the company, sector of activity or interprofessional level since outside companies unemployment is on the rise?** The number of people requiring retraining is growing in line with the acceleration of this development.

PARADOXES AND PITFALLS IN STRATEGIES OF CONTINUOUS TRAINING

PEER HULL KRISTENSEN

1. Introduction

In his summary paper, "New Pressures for Company Training", Jacques Delcourt provides a concise idea, an "ideal-type", of the future state for how firms, workers and institutions must interact in order to meet the competitive challenges which he envisages. In his "Introductory Comment", he proceeds to pose a number of principal questions that must be answered in order to create this ideal-type in a way that will be acceptable to the social partners. Combined, these two contributions offer a framework for cross-national European discussions, allowing us to universalise our understanding of how radical the universal transition is which our societies must complete. Former identities of enterprises and workers are being redefined and so is both work and the societal institutions. Firms are moving from Fordism/Taylorism to a system based on innovative multi-skilled workers under continuos training, interacting intensively mutually and with employees in other firms of a similar type.

I can easily follow the arguments in these papers, but I see a danger in the kind of conclusions and implications we may draw from them. If, for instance, we answered the questions posed by Delcourt and deducted the necessary institutions to be designed for each society, we would be committing the same mistakes as those who thought that they could simply by design transform Western European enterprises to fit a uniform Fordist template after the Second World War.

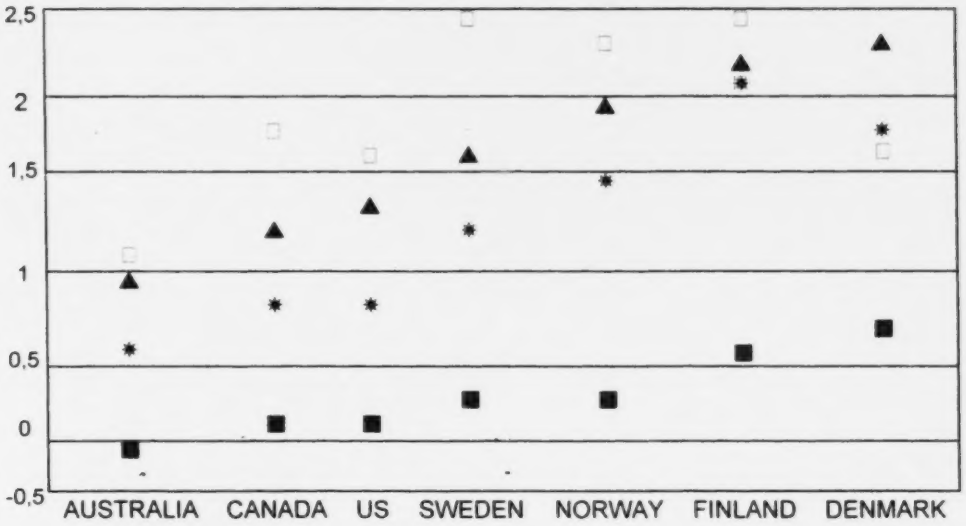
It took us a long time discover that the transformation to Fordism and Taylorism rather than being singular was plural and generated or reproduced much of the diversity in economic organisation, which was, and still is, one of Europe's great advantages. For that reason it is also obvious that even if we took for granted that European societies were to indulge in a transformation towards the very same "ideal-type", each country, region, sector, or locality would have to initiate a highly divergent process in order to achieve the same end results. Furthermore, the democratic, political and cultural preconditions for groups to engage in such processes of reconstructing institutions are unlikely to be fit for this task. From research stimulated by CEDEFOP, we know that being a worker or a manager in say Germany and France is quite different, and if they will engage in collective action they will probably evoke very different forms in the two countries (Maurice, Sellier and Silvestre, 1986; Kristensen 1996; 1997). Not only do they represent very different "world views" (Sabel, 1982), they also hold very different institutional means, and their ability to associate as groups and social capital differ widely. The process of "creative destruction" by which each country is bringing about transformation is hardly governed by the functional needs deducted from a future "ideal-type". It is rather the outcome of historical political and economic struggles, distribution of power and interests, and the cultural ability to cohere strategies across conflicting groups.

2. Diversity in situations and conflicts

During the last two decades, a growing number of publications has demonstrated that firms are constituted differently in various European countries (Whitley, 1992; Whitley and Kristensen 1996). Studies have demonstrated that even though templates of organisational design have been diffused across countries and continents, they never succeeded in creating uniform values vis-à-vis these organisations among the many groups of participants (Hofstede, 1984). Therefore, behavioural patterns within these organisations are still highly different. Literature is providing increasingly sophisticated explanations for these phenomena, be it "cultural values" (Hofstede,1984); "societal effects" (Maurize et al 1986), "spontaneous sociability" (Fukuyama, 1995), or the national systems of governance that stipulate the rules of the game by which social actors can strategise to reproduce or change their situations (Whitley and Kristensen, 1997).

Figure 1 is a simple illustration of such national differences which are relevant for discussing the role of enterprises in continuos learning:

EFFECTS OF MANAGERIAL LEVEL AND COUNTRY



□: *Upper Manager*
▲: *Middle Manager*
✱: *Supervisor*
■: *Non-Manager*

(Source : Dobbin & Boychuk, 1994)

The figure is an attempt to measure the relative degree of discretion which different groups of employees "feel" that they have in their work situation. The data were compiled by letting different employees fill in questionnaires, and the figure gives us an impression of a certain group's job discretion compared to other groups in the same country and to an identical group in other countries.

The figure is telling for a number of reasons. First, it shows that by the end of the epoch of Taylorism, managerial groups and workers are characterised by low discretion in most

Anglo-Saxon countries. However, the effect of Taylorism seems to have been very different in the Nordic countries in which all groups of employee seems to enjoy high discretion. Second, the figure shows that it is possible for organisations to function in such a way that all groups comparatively gain in discretion. In other words, increased discretion among workers does not necessarily imply reduced discretion among managers (Sweden, Norway and Finland).

There are many ways of interpreting the figure. To me, it gives a picture of how successful the social groups within enterprises have been in their struggle for a social space, allowing them to exploit their abilities socially and have their professional aspirations met. In all countries managers and supervisors have been more successful than workers (non-managers) in achieving this balance. But Danish workers have been dramatically more successful than their Australian colleagues.

The level of discretion indicates something about to which extent the employee is able and allowed to combine planning and execution. It is therefore also a rough indicator of how far the countries measured are from the ideal-type suggested by Jacques Delcourt. Relatively speaking, US jobs for workers will have to undergo a much more radical transformation than the jobs of their Danish colleagues. On the whole, the figure suggests that Anglo-Saxon countries will be facing more radical transformations by upgrading the responsibility and discretion among their workers, than will be the case in the Nordic countries. At the same time, the Nordic countries have probably far stronger institutional means (worker solidarity, loyalty among workers and enterprise and vocational training facilities) for solving their minor problems than the Anglo-Saxon countries have for reconciling their comparatively greater problems.

In most of the countries listed in Figure 1, employees can move up in the organisational hierarchy and thus achieve a better balance between aspirations and abilities. In many countries, vocational further training schemes have been created by and for distinct social groups with the purpose of enabling these individuals to improve their social position or place by simply embarking on an institutionalised career-ladder of vocational training, job experience, etc., and in doing so improve the honour and respectability of the entire group vis-à- vis other groups on the labour market. In most countries, many social groups have traditionally been engaged in such further training motivated by the expectation that by the end of the process they will fulfil careers that were institutionalised in the past.

Changes in both supply of and demand for further training, or universalising this as ćontinuos training for all groups, need not only be conceived by different employee groups as just a world of new possibilities. It may as well be seen as the very destruction of an institutionalised career pattern for individuals and for social groups as loss in social prestige.

It is thus not surprising that experiments in many countries with new ways of upgrading skill-levels for workers, changes in the positions and roles of supervisors and middle managers have evoked conflicts. The effect may even be that workers become less involved in different further training schemes than they were in the past. As a result, both training activities and levels of expertise may decline among workers temporally. Such reactions are individuals' protest against changes and they reflect an emerging group consciousness of the fact that the group can no longer fight for social space within the institutionalised pattern of careers. Groups may - depending on their ability to maintain

group solidarity - prepare some kind of collective action. In any case, it is a serious signal to managers that their actions are no longer found legitimate and that they are losing traditional foundations for their own authority (Bendix, 1974).

Managerial initiatives for upgrading skill-levels in factories by focusing on the training of a small group may be met with highly uncooperative reactions from the rest of the workers' collective in that they may jointly reject new holders of new skills access to the pool of tacit knowledge which rests among the workers. In this way, persons with the new skill-profiles may end up having no access to the tacit knowledge that can be controlled by the work-collectivities and the "new workers" become easy victims in the competitive game going on in the factory.

In other cases, managers have chosen to offer all workers higher wages in return for achieving polyvalent skills. People are asked to rotate between different types of work and are paid according to the number of skills they achieve in this way. For practical reasons it is much easier to rotate people among quite simple work-stations, and firms which have introduced such arrangements discover that workers with a multiplicity of simple skills will often end up earning considerably more than people with highly demanding jobs and skills, since the latter employees can neither be removed from their jobs to achieve additional skills. Nor is it easy to recruit people for demanding jobs on rotation-schemes, since it takes comparatively longer to achieve the same increase in wage as can be achieved in a much quicker way by learning yet another simple job. Some firms have initiated such reforms only to discover that they are paying their best workers the lowest wages and therefor risk losing their most important competencies.

Obviously, such problems are initial difficulties and can be overcome. The problems will probably be less where extensive further training has already become institutionalised by social groups and is anticipated to be rights and obligations for individuals, and greater where such traditions are not part of the historical legacy. To me, it is obvious that groups and individuals will react according to this legacy and create conflicts each of which will require specific solutions. Accordingly, the compromise that can lead to new institutions which allow enterprises and their employees to engage in the transitional process will be distinct for each country in Europe.

3. Paradoxes during the process of transition

But even in cases where the initial problems are easily overcome, a process of transition focusing on continuos training will face a lot of paradoxes which will call for the social construction of new institutions. The reason is that a transitional process almost inevitably will develop "skills without a social space" (expression borrowed from Charles F. Sabel). The question we are facing is, on *what* should we build the collective institutions of continuos training?

Remarkably few observers have realised that the transition we are witnessing is breaking with a former pattern in which skills had social spaces. Social groups belonged to certain professions, joined distinct unions and occupied certain jobs in distinct bureaucratic offices, populated distinct enterprises or public organisations and came from specific vocational and educational institutions. This whole system served to give the individual a

social identity as industrialisation effected a change from a society based on small communities to one based on large cities. This system has been quite effective in providing identity, professional and moral standards, and in allocating rights, duties and responsibilities. The current transition process as sketched by Jacques Delcourt questions the institutions by which we sorted out individuals and made the division of labour possible during the industrialising past.

Just as observers witnessing industrialisation saw it as a transformation from closely tied communities to mass-society, we predict that the emerging transition will contain situations in which people are considered "footloose", neither respecting call nor vocation. It is obvious that new habits will be seen as a break with old Lutheran and Calvinist virtues.

We think that the following *two major* and *three minor paradoxes* will emerge in societies under one form or another when societies are well under way in the current transition:

First Major Paradox: Self-defeating labour markets:

As enterprises invest in continuos training for workers, they and their workers will discover that the more they invest, the more will their workers be in demand by other employers. Consequently, the better the workers' skill, the higher the risk is that firms will lose them to other firms.

According to Fukuyama (1995) this was the situation that initially led to the invention of the Japanese system of lifelong-employment. There is no doubt that we may eventually see all sorts of initiatives from employers' associations to feudalise labour markets. It may be done simply by signing contracts that prevent workers from seeking similar employment in other firms, but it may also be effected by handing over the rights to certify worker skills to individual employers, thereby seriously threatening the flexibility of labour markets. But there is, of course, a better alternative provided that societies simply socialise the costs of continuos training so that it becomes a "free good", which is certified by public authorities.

Second Major Paradox: The loneliness of the long distance runner

The more people engage in the process of continuous training, the more diversity will emerge in the nature and levels of skills within a firm. In other words, the more skills a person has achieved, the less he or she can be properly assessed and respected by colleagues within the firm. Even the feedback-mechanism of earning a reputation is at risk. In such a situation individuals will try to socialise with individuals outside the firm or the group of immediate colleagues to engage in competition over professionalism and co-operate professionally with external individuals who offer this form of social feed-back.

This paradox is emerging in Denmark, where continuos training has been part of life for many years. It is recognised by for instance union shop stewards who for long have seen their members as soldiers in a war where they, by engaging in still more advanced training, were able to secure that new competencies would be placed on the factory floor rather than become a part of the administrative hierarchy of the enterprise. Such shop stewards now experience their best "soldiers" to behave in a way that seems "disloyal", as these soldiers seem to be less and less engaged in the interests of their mates and of the

firm. In Denmark, where the state finances continuos training institutions and subsidies earnings during training periods, it is highly probable that such long distance runners from many different firms have developed a mutual understanding which now serves to guide their orientation also concerning what the next steps in continuos training should be.

Of course, economists offer a standard cure for both paradoxes. This cure has two ingredients which are combinable in any possible way: "Monetary incentives" and "career opportunities". Probably they will advocate monetary incentives among workers in order to secure that they act as agents according to their principals' wishes. In our view, this will effect a growing diversity in wages among workers. If this happens, it is a widespread experience in industry under Fordism that such differences increasingly will make horizontal communication among workers difficult as they will react by not helping each other nor diffusing their knowledge to each others, as they see each other as competing over benefits from their principals. Thus, monetary incentives work against the transitional goal of achieving speedy horizontal communication within the enterprise. Concerning the use of "career opportunities", it is typical for most enterprises that have embarked on this transitional process that they have reduced their number of middle-managers and hence reduced the prospects for any individual of the lower stratum of the enterprise. More so because the firms thereby have lost an official way of recognising individual skills and competencies when the collegial mechanisms of reputation fail informally to recognise gifted individuals. It is obvious that this problem is substantial and growing, and it has for long given professional organisations problems in managing their experts. Gifted surgeons, bright researchers, the best consultants have long suffered under the fact that the better they perform their art, the sooner they will become "promoted" to a managerial position losing the joy of exercising their art and craft, being "privileged" by the tedious work of suggesting and controlling budgets, hiring and firing, that is, evaluating rather than exercising expertise.

In my view, these two paradoxes are major and principal, because they seem to be *self-defeating for the entire transition process*. Though they are unintended consequences they are so much related to the transitional process that the stronger it becomes the stronger these two paradoxes become.

The *minor* paradoxes, to which we now turn, are minor because they may only pose temporary challenges, and as we shall see later it is already now possible to see the emergence of institutional solutions to these.

First minor paradox: The catch 22 in industrial careers

Whereas formerly manufacturing industry offered workers without recognised skills an opportunity of a job if he or she had no better career prospects, the ongoing transitions require production teams capable of coping within shifting contingencies in such a way that their work is always conducted efficiently. Such teams are becoming increasingly reluctant to recruit new members if these have not already earned themselves a recognised reputation in a previous industrial career. But how can people embark on a career, if they need one to embark in the first place?

***Second minor paradox*: First movers get stuck**

It is a well-known phenomenon in educational dynamics, that the more knowledge and skills a person achieves, the better he or she will be able to learn new skills, because skills achieved make it possible to combine the new with "something". Therefore, in firms engaging in continuos training, a "gang of first movers "typically emerges. They rise to this role because managers feel that they get "more value for the money" if they send members of this gang, whereas the gang among workers typically gain the reputation of being able to select skills and educational projects that are beneficial to the larger group The paradox emerges from the fact that these people are simultaneously allocated to a section of critical jobs, and the enterprise will suffer whenever they are absent. Therefore, the better they have become established as "first movers", the more risky it is to let them attend further continuos training. Simultaneously it does not help to send others as the core groups participation is needed to motivate the rest of the workers. The smaller the enterprise is, the more critical this paradox becomes. Therefore, it is often observed that SMEs are not engaging much in continuos training.

***Third minor paradox*: In tranquillo mors in fluctu vita**

Firms go through both highly unstable and stable periods even in a general regime of "continuos" innovation. Just as we learned in the past that if employees were socialised to the stable life of machine-bureaucracies, they would resist changes, we are now gradually learning that if employees are socialised to change, they will behave so as to evoke crisis if a firm is so successful that it enters into a period of stable and slow growth. In such a situation, the best people will start to leave as there are no new challenges that can prevent them from becoming bored, while at the same time they lose their role as trouble shooters as they are not called by anyone for such tasks. For that reason, during stable periods the enterprise risks losing its best employees and is therefor preparing its next crisis if not its own extinction.

4. Creating institutions reconciling the paradoxes of transition

The paradoxes formulated above are formulated in highly abstract or principal terms, but each and every one earns its formulation from situations observed during my own field work in enterprises undergoing such transitions over the last 15 years. Their formulations should not only stimulate reflection, but also call for social action.

Some of you may already have concluded that if such paradoxes do in fact emerge, not only analytically but also in reality, then the troubles we are facing in engaging our societies in such transitions by far outweigh the possible gains that transitions may provide.

I do not agree with this conclusion, since we are no doubt bound to progress along the path sketched by Delcourt. These paradoxes, however, give us an indication of both how radical and of which nature the institutional innovations we should aim to construct must be.

I do not think it possible to master such challenges and paradoxes by design, i.e., by a master plan. We are bound to experiment and to proceed incrementally. The problem is rather whether we learn from these experiments and are able to accumulate experienced practises. Whereas I have no doubt that throughout Europe people, firms, institutions, and public authorities are making bootstrapping reforms, nobody is organising the systematic collection and exchange of information about how these paradoxes have been reconciled by firms, unions, employers' associations, professions, localities, vocational training institutions or state bureaucracies. Thus, in Europe beautiful institutional innovations may emerge, which are only evaluated by a few local spectators.

In my view, the CEDEFOP could play a crucial role in bringing such institutional innovations to our attention, evaluation and refinement by organising systematic research and ongoing debates about this matter.

When we made the first reports from nine countries on "*The Role of the Company in Generating Skills*", we saw such a task emerging with our studies. But our steps were initial and they were never continued. In our own study of Denmark (Kristensen and Høpner, 1996) we reported practises that reconciled both the first and the second of the three minor paradoxes. I am aware that unions and vocational training centres in some regions in Denmark are working along lines by which they may un-intendedly resolve the third minor paradox. Combined these resolutions may deal with important aspects also of the two major paradoxes. To me it seems obvious that other parts of Europe would gain from such knowledge to inspire their own indigenous institutional reforms.

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THE RISKS AND OPPORTUNITIES OF LEARNING ON THE JOB

EDGAR SAUTER

1. Trends in work and the need to learn

The workplace as a place of learning and the concept of on-the-job learning are receiving growing attention in Germany, largely due to changes in the nature of work which create both a quantitative and a qualitative need to learn that cannot be adequately satisfied outside working hours. While providing greater scope for action and planning, post-Taylorist working structures also call for additional knowledge and skills to ensure the flexibility necessary for competitive production concepts - high-tech production, customer-orientation, short innovation cycles and the like - and its further enhancement through continuous learning. Slogans such as **"lean organization", "the learning enterprise"** and **"Total Quality Management"** similarly have a number of implications as regards the need to learn.

- Lean organizations make for broader responsibilities and thus immediately give rise to an additional need to learn on the part of the employees involved.
- The trend towards flatter hierarchies in lean organizations results in tasks being combined. Qualitatively different activities such as planning, execution, control and allocation of resources are linked together and entrusted either to individuals or to small groups. This creates a need to learn that is greater from both the qualitative and quantitative point of view.
- The introduction of group working and the use of project groups typical of lean organizations call for cooperation and communication between employees. In addition to specialist occupational skills this generates a need for broader core skills such as the ability to work with others, methodical working, and problem-solving skills.

The fact that lean organizations make for a growing need to learn does not, however, necessarily mean that the firms concerned invariably facilitate the learning processes involved. A whole series of indicators testify to learning being hampered because of the necessity for more intensive working, which means less time for learning and smaller workforces. Such obstacles to learning on the job result, for example from:

- **the growing trend to outsource certain tasks** which has the effect not only of reducing the content of people's work and opportunities for learning but also of impeding the flow of information and cooperation;
- **the just-in-time principle** which reduces, if not wholly eliminates, preparation and hence also learning time;
- **the growing use of teleworking** which excludes a section of the workforce from informal communication and learning processes;

- **the distinction made between core and peripheral workforces** which generally assures core workers priority in access to training facilities.

The noticeable shift in the age and qualification structure of the workforce also enhances interest in in-service training. A longer working life means that innovation can no longer wait for the next generation to come along but will increasingly involve older workers. Training must therefore be specifically designed with the needs of older people in mind. And since their learning processes need cognitive and practical references, work-integrated learning and training methods are liable to be those most used. This will probably also apply if in future the workforce is characterized by a larger proportion of well-trained people with higher educational qualifications.

2. Objectives and advantages of work-integrated learning

A number of educational and economic interests and objectives are bound up and pursued in connection with work-integrated learning. The general intention is both educational and economic, namely rapid application of what has been learnt in order to cope with the growing volume of work and more stringent quality requirements.

2.1 Greater efficiency through more effective application

When work and learning are kept separate, difficulties can arise when an attempt is made to apply the knowledge and skills acquired in training courses in a practical work situation. This is especially the case when an individual has to try to do so with no further assistance from a skilled technician or trainer. Work-integrated learning, on the other hand, permits knowledge and skills to be acquired while they are actually being practised and exploited. This can help to avoid problems of putting theory into practice and a loss of efficiency through frustration, particularly when the subject-matter to be mastered is itself demanding, which is the case for a growing number of workers because of the trends we have outlined. Such familiar core skills as thinking and acting in context and planning, steering and controlling one's own work or the ability to think in the abstract and creativity, which previously tended to be confined to a few academic fields, have with the delayering of working structures now become relevant to almost every type of job. Developing such competences as well as the ability to build knowledge and skills on one's own account typical of learning organizations is not achieved by further training courses organized outside the firm, which merely serve to reinforce them. Motivated learning of this kind, the argument runs, needs to be rooted in the working structures themselves, which reflect the firm's corporate culture. (Bergmann, 1996).

2.2 Costs lower thanks to reduced release times

Firms expect further advantages from work-integrated learning in terms of improved efficiency because it solves the problem of applying theoretical knowledge in practice and because releasing employees to attend training courses outside the firm often poses problems for small and medium-sized firms especially.

A good two-fifths of firms (Weiss, 1994) have difficulty releasing employees to attend outside courses. Lean management, which reduces personnel, aggravates the problem

further. Many firms therefore see the possibility of combining learning with work as a way out of the dilemma, especially since company restructuring frequently calls not just for the retraining of individual workers but of whole organizational units. Avoiding or at least reducing the need to release employees for training also does away with the need to pay compensation for loss of wages, which accounts for a very substantial 48% of continuing training costs (Grünewald and Moraal, 1996). How far external training costs in connection with work-integrated learning (for example for outside moderators or media) can be offset is a question that cannot at present be answered. Attempting to calculate the cost of work-integrated learning currently comes up against insurmountable difficulties of definition and recording and is therefore not considered worthwhile (BIBB/IES/IW, 1997).

2.3 Just-in-time and learning in leisure periods

Work-integrated learning has another important advantage from the point of view of employers in that it can be better tailored to their requirements in terms of time and content. This just-in-time function should also ensure greater employee motivation than the "training schemes for the masses" frequently offered by external training bodies. There is, therefore, much to indicate that more work-integrated learning can ensure greater learning continuity than sporadic external training courses. Another possible argument in favour of work-integrated learning from the employer's point of view could well be that more intensive on-the-job learning often results in the learning process being shifted to people's leisure time. This is the case, for example, with self-directed learning using various media, distance learning or supplementary phases of work-integrated learning for which the necessary peace and quiet is frequently not possible during working hours.

2.4 Improved access for the less skilled

Work-integrated learning has a number of advantages to offer for employees as well. Training is easier to come by than in the case of outside training courses, especially for specialists and those with no formal qualifications. Negative school experience, which often discourages those without formal qualifications from participating, is not a serious obstacle here. It would greatly benefit such employees if the skills obtained via work-integrated learning could be certified and used as credits towards the acquisition of generally recognized formal qualifications.

3. Forms of work-integrated learning (organized learning at the workplace)

Attempts so far to define and classify the different forms of on-the-job learning have not resulted in a uniform and generally accepted typology of learning methods. A wide variety of terms are used for learning on the job - including work-related learning, work-integrated learning, on-the-job training and learning by doing - and often synonymously. There is also a long list of subcategories and methods for on-the-job learning. A number of attempts have been made to put order into and categorize this multiplicity. Severing (1994) groups "Methods of work-related in-company training" under a number of different headings:

Table: **Methods of work-related in-company training**

Traditional methods of instruction at the workplace	Shadowing 4-stage method; "show how/do" Analytical instruction
Action-based forms of in-company learning	Work-based projects Working with a written guide
Group-oriented, decentralized continuing training	Quality circles Lernstatt (≅ training workshop) "Learning islands" "Find out and demonstrate" Job rotation
Individual work-integrated continuing training	...using conventional methods - Induction - On-the-job training Self-training on the job with computer-assisted learning systems Tele-learning on the job

Source: Severing 1994

The term work-related training is used here to denote *intervention by an instructor* to design workplaces and working methods. It is not left to chance to decide whether or to what extent workplaces are equipped so as to permit functional learning. Instead training plans and intervention by a trainer ensure that with employees' learning abilities as the starting bases progress is made towards acquiring the skills and competences needed for a particular job.

The Continuing Training Reporting System VI (BSW) of 1994 puts work-related training and its various subdivisions under the heading of informal continuing occupational training, which also includes learning in one's leisure time. The BSW's results as regards informal training show that in 1994 52% of employed people in the 19 to 64 age group had used at least one of the "other forms of occupational training" mentioned in the following table as a means of learning (BMBF, 1996).

Table: **Informal occupational training 1994** *(Information provided by employees at that time)*

Reading relevant books and trade journals	33%
Self-teaching by the "watch and try" method	23%
Short forms of instruction e.g.lectures and half-day seminars	23%
Instruction/induction by fellow-workers, superiors, etc.	16%
Trade fairs and congresses	15%
Self-teaching using various media	11%
Organized visits to other departments within the firm	8%
Quality/workshop circles, training workshops, group work	4%

Source: Infratest Burke Sozialforschung (BMBF 1996)

The various categories of *informal occupational training* represent a mixture of methods which one may assume are aimed at triggering a learning effect. Carefully thought-out trainer intervention goes hand in hand with work organization and information measures. Functional learning through work is, however, not included. The findings show that traditional forms of further training tend to predominate while new pedagogically demanding concepts such as quality circles and the like are only relatively seldom mentioned.

The percentage of those taking part in informal occupational training is twice that of those attending training courses. The overall percentage of those benefiting from continuing occupational training is 60% because those attending training courses participate in other forms of training far more often than do those not attending courses. The separate breakdowns show that continuing training courses focus on people already in work. The differences in participation in informal training between the two groups are just as marked as in the case of course attendances. The results show among other things that:

- people employed in large firms take part in these types of informal training more than do people in smaller firms, who traditionally tend to receive training from the firm on the job;
- there are considerable differences in the rates of participation between employees with a university degree and those with no vocational qualification;
- there are differences from one sector of industry and commerce to another but banks and insurance companies and the health sector head the attendance league for both formal and informal training courses.

The European FORCE survey on in-company training covered both **continuing training in the strict sense of the term** (courses and seminars) and **in the broader sense** - thus **work-related training**, **information meetings** and **self-directed learning**. The following table shows the percentages of participation by German firms and their employees in work-related training and its various subdivisions. The figures are based on a written survey of 9300 companies with more than ten employees.

Table: **Availability and use of subforms of work-related training**

	Percentage of firms	Percentage of employees attending
Instruction at the workplace by superiors and skilled employees (coaching)	41%	16%
Induction to cope with technical/organizational changes or with the introduction of new technology	35%	5%
Induction of new employees	30%	10%
Exchange programmes with other firms	4%	14%
Job rotation	4%	3%

Training workshops	4%	4%
Quality circles	5%	3%
Self-directed learning using distance learning, audiovisual aids such as books and videos and computer-assisted learning	17%	3%

Source: Grünewald 1997

These categories of work-integrated learning also involve a mix of in-service training and work organization elements. The figures quoted by firms largely confirm the replies given by employees in the BSW report. In other words, traditional methods of instruction and induction, in which instruction, information and continuing training can hardly be distinguished from one another, tend to predominate. New concepts such as job rotation and training workshops are comparatively rarely available and - with the exception of exchange programmes - also little used.

4. Characteristics of work-integrated learning

4.1 Multifunctional instruments for personal and organizational development

The different forms of work-integrated learning constitute a heterogeneous bundle. What they have in common is that each is designed to influence or shape the relationship between work and the learning process. This is true of instruction from fellow-workers just as much as for cooperation in quality circles. Also to be taken into account, however, is the fact that these measures and forms are in the main multifunctional - that is, they are not merely aids for in-service learning or skill-building but also serve as instruments for personal and organizational development and are essential elements of corporate culture.

It is especially this **multifunctional aspect** that distinguishes the different forms of work-integrated learning from conventional continuing training through courses and the like. Depending on a company's philosophy and management strategy, work-integrated learning may contribute, for example, to the continuing improvement of work results, employee involvement, organizational development and customer orientation, and also provide a means of information and control for managers or of determining training needs at both individual and company level. These functions are not secondary to the skill-building function but constitute the true core of work-integrated learning.

4.2 Different profiles and functions

Each of the various forms of work-integrated learning has its own particular profile as regards the functions mentioned. A survey carried out in 500 firms in Germany to supplement the European FORCE survey confirmed this to be so (Grünewald and Moraal 1996).

Let us take quality circles as an example. It is clear that this form of learning was originally conceived as a means of improving the quality of products and services and in German companies was used chiefly as a means of encouraging greater cooperation and boosting

employee motivation. According to the people questioned in the various firms, quality circles are nowadays regarded especially as a means of improving the results of work (97% agreement) and employee involvement (83%). Job rotation, on the other hand, apart from being seen as a means of improving the results of work (83% agreement) was regarded mainly as a form of behavioural training (69%) and organizational development (67%). Overall, however, there is still considerable uncertainty as to what purpose continuing training plays in the growth of competence within a firm and of organizational and corporate development, especially since it is not clear how its contribution to corporate development can be determined (Staudt and Meier 1996).

4.3 Little formalization

Once the multidimensional nature of the different forms of work-integrated learning is grasped, the difference between it and conventional types of training becomes clear. Those responsible for the practical aspect of training agree particularly on the fact that work-integrated learning serves to extend knowledge and skills and requires the fixing of learning objectives and the use of computerized or audiovisual aids, as well as the involvement of superiors as trainers. There is far less agreement as to whether these forms of learning presuppose that the skills needed are systematically determined beforehand, a skill-building plan drawn up in writing and that specially trained instructors are used. In the view of many practicians any feature tending to **formalize learning** as an independent form of skill acquisition runs counter to the whole idea of work-integrated learning (Grünewald 1997). Creating a **system of certification** for work-integrated learning would also fall into this category (BIBB/IES/IW 1997).

4.4 Working and learning

The different forms of work-integrated learning all lie somewhere between the two extremes of work and learning. One is struck by the fact that from the practical point of view there is no difficulty in classing individual measures more as learning or more as working. While self-directed learning is regarded more as learning and job rotation more as work, the opinions of those involved at the practical level in quality circles are not so clear. A good half see learning and just on half work as the dominant factor (Grünewald and Moraal, 1996). How it is actually classified will probably depend on the company's own philosophy. If quality circles are seen more as a means of in-company training and of giving shape to working processes the emphasis will tend to be on the learning aspect, whereas if they are viewed more as a means of work organization which incidentally has a useful training function the work aspect will come to the fore.

5. Learning by doing (informal learning on the job)

5.1 Intentional and functional learning

Forms of work-integrated learning which, like job rotation, are viewed more as work focus on changes in the workplace and general working conditions in order to foster the learning process, particularly from the behavioural point of view. Here the training aspect lies essentially in a calculated altering of work content and working processes and conditions. Such planned, organized and assisted learning on the job must be clearly distinguished from **learning by doing**, which unlike intentional learning is a functional learning process

through which an individual passes when coping with the tasks and working conditions involved in his job.

5.2 Working structures encouraging or hindering learning

Research in the field of industrial psychology has repeatedly demonstrated that the nature of work and work structures as well as the working environment considerably influence the learnable content and the scope for learning offered by a job. Simply by making a job more demanding and with no need for training it is possible to increase the interest and motivation and influence the behaviour of the person concerned and, so long as he/she is not overstretched, can generate exactly the skill required. *It has, for example, become clear that where* Taylorist working structures exist and jobs are broken down into component parts that give workers little chance to influence and control their working conditions, motivation is low and developing skills almost impossible. Findings such as these have led industrial psychologists not only to analyse individual jobs from the point of view of **learnable content** but actually to produce guidelines for designing workplaces with a view to avoiding negative effects and enhancing more positive aspects (Münch, 1997).

When seeking to define or create structures to encourage learning one has to view matters in both a macroscopic and a microscopic perspective. The former relates to **general conditions** such as organizational structures, corporate culture, networking and cooperation between organizational units. The microscopic focus, on the other hand, takes in the **potential learnability of tasks at each individual workplace** (Bergmann, 1996). Conditions that encourage or hinder learning at the workplace can thus described and demonstrated systematically (see for example the ideal training concept as outlined by Franke, 1982).

5.3 Group working

Group work in its various forms is one example of where learning by doing meets work-integrated learning as a form of training. In recent case-studies concerned with different forms of learning on the job the employers' representatives firmly classified group working as a form of work and not as a form of work-integrated learning. At the same time it became clear that the adoption of group working calls for **complex learning arrangements** including, for example, self-teaching, induction, job rotation and instruction by fellow-workers and others with a high level of skills. Use is also frequently made of more formal continuing training such as induction seminars (BIBB/IES/IW 1997). Putting the organizational principles of group working into effect (delegating responsibility to the grassroots, combining a number of tasks, and making the group responsible for coordination of work and cooperation) will probably create a greater need for work-integrated learning since the greater demands in terms of learning can only be met by more time for learning and more teaching aids.

6. Risks and opportunities

The many advantages of work-integrated learning and learning by doing should not blind us to the fact that this form of learning is not only possible subject to the fulfilment of certain preliminary requirements.

6.1 Taylorist work structures hinder realisation

Work-integrated learning is almost always regarded as desirable from the educational point of view, yet broad areas of industry lack the basic conditions for putting it into effect. Taylorist working structures still persist and working and learning are largely kept separate. There exists neither a holistic structure of tasks nor the desirable self-directed cooperative acquisition of knowledge and skills involving a company's entire workforce. Although the empirical results of the FORCE study show that almost two-fifths of firms with more than ten employees offer some form of work-based training, this tends usually to be the more traditional instruction and induction, which frequently take the form of "Do it this way" and is concerned more with training workers to perform repetitive operations. More demanding forms of learning such as job rotation, exchange programmes and quality circles are still confined to a relatively small group of large firms and have often not progressed beyond the experimental stage, subject to the constant threat of what has been achieved being reversed again.

6.2 Outsourcing and continuing training

In those areas where post-Taylorist work organization as outlined above (Section 2) has gained a foothold with all its consequences for the need to learn, the question that has to be asked in each case is whether lean organization, while providing scope for action and learning opportunities, does present an obstacle. Increasing work intensity with its consequences for the time available to learn or outsourcing of work, which has the effect of reducing learnable content and preventing cooperation, pose a real threat to the advantages of work-integrated learning. Other dangers threaten when it is not simply specific jobs of work that are **outsourced**, but company training activity which is then bought in as required. I*n such cases t*raining-assisted measures to encourage on-the-job learning are liable all too quickly to be done away with. When this happens, as it frequently does, even a system of group working previously introduced with considerable effort and expense can degenerate into a kind of democratic Taylorism (Severing, 1997). Another danger is that of learning by doing being reduced to the skills in demand at the time. **Lean production**, then, implies **lean learning**. This is particularly so when, for example, combining work and learning as group working aims to do is rendered more difficult or even impossible because the time needed for intra-group communication is reduced on grounds of cost (Frieling, 1993 and Markert, 1997).

6.3 Reduced access for the lower-skilled and unemployed

Against this background there is little chance of groups who, because of their lower educational level and occupational status, have been given little further training being given more opportunities to participate in work-integrated learning. According to the BSW findings, the group-specific differences found in the case of continuing training are repeated for work-integrated learning. All this tends to strengthen the belief that the acquisition of skills and competence by on-the-job learning has so far remained a mere vision demanded by theory but not yet translated into practice (Staudt and Meier, 1996).

6.4 No practicable ideas for certification

In the circumstances it is understandable that even firms that actively encourage on-the-job learning hold back when it comes to the question of **certification** and accreditation of skills gained through work experience. Despite the positive attitude to work-integrated learning, certification by firms is in the main not viewed favourably and even the works councils and employees themselves see it as involving considerable problems (BIBB/IES/IW, 1997). This is only partly a matter of vested interests and due more to a lack of **practicable ideas** as to how the contribution made by the various forms of on-the-job learning to individual skill- and competence-building might be determined for certification purposes. Measures designed to develop core skills and competences pose a particular problem here.

6.5 Combining and linking forms of learning and venues

The potential of work-integrated learning and the workplace as a place of learning are limited by the fact that by no means all occupational learning objectives can be achieved on the job. Forms of learning and venues away from the workplace will still be needed for the time-consuming process of basic training. A **variety of learning venues** will also be needed for continuing training, for example, for courses leading to formal **qualifications for career advancement**. Work-integrated learning will make a useful contribution here, especially if experience gained at the workplace is accredited by certificate. However, the combination and interaction of several learning venues is necessary to balance out any one-sidedness in training on the job.

6.6 Exclusion of the unemployed

A further reservation attaches to work-integrated learning, namely that its benefits do not extend to the unemployed unless new models for acquiring skills on-the-job are devised to ensure their inclusion. Unemployed workers could, for example, be taken on as temporary replacements for employees on release. This has been the practice in Denmark for a number of years and has the advantage of enabling unemployed people to benefit from work-integrated learning while freeing permanent employees to take part in further training outside the company (Müller, 1994).

7. Outlook

Given the limitations and risks attaching to work-integrated learning, its further development is likely to be as follows:

7.1 Transparency of the contribution of work-integrated learning

Work-integrated learning in its various forms should be further developed because of the manner in which it interacts with the work process. Traditional forms such as instruction and induction have a relatively marked information, instruction and instruction content at the expense of opportunities for independent practical working. In forms of training such as quality circles that put the accent more on group learning, the emphasis tends to be on

organizational and corporate development and its role in individual skill-building and development of abilities is still very unclear. This makes it difficult to devise practicable means of developing and **certifying** skills based on work experience. Efforts should be made to clarify how different forms of learning interact and the learning objectives, skills and competences best attained through them.

The connection between general working conditions, such as organizational structure and corporate philosophy, and the specific tasks to be performed on the one hand and the skills acquired on the other also needs to be defined in the case of functional learning. This would make it possible to ascertain **which work structures favour and hinder the learning process** and possibly even to draft a typology of work structures and tasks and their implications for skill-building and corporate development. The overall contribution of work-integrated learning and learning by doing to corporate development needs also to be clarified. This could be done, for example, by analysing the **figures** for absenteeism, frequency of complaints, the suggestion scheme, quality assurance and learning objectives from manual skills to creativity.

7.2 A networked training system

The relationship between work-integrated learning and other learning forms also has its relevance for education and training policy. The interest in dual structures at all levels from initial and continuing training up to tertiary education shows that work-integrated learning cannot replace other training forms and venues but can only complement them. In addition to combining on-the-job training with formal training one should think about creating a **network of learning** and training facilities that would include the workplace, leisure time and the media. Learning arrangements could combine formalized learning in training centres, work-integrated learning, incidental learning on the job and self-directed learning in one's leisure time (Sauter, 1997). A network of this kind would create new opportunities for those interested in further training to plan their training themselves. On the other hand, it would also generate new problems of coordination when learning venues stand unconnectedly alongside one another, owing to the differing transparency of the modular courses on offer, counselling and quality assurance.

A matter of crucial importance is the possibility of combining formal and informal learning with a view to obtaining a formal qualification at further training or university level. The need for it finds expression in all the talk of reform and the projects for the reform of vocational training and for lifelong learning currently being put forward. It reflects, for instance, in the **additional qualifications** that would render the transition from initial to further training more flexible and which could be acquired during or immediately following basic training in various ways. Firms, vocational schools, training bodies and other responsible bodies would certify these additional qualifications, thereby making them clear and acceptable to the labour-market. Formal and informal qualifications should also be combinable so as to provide access to higher education and career advancement. The vocational training reform project (BMBF 1997) seeks to ensure that in future additional qualifications, further training modules and skills acquired on the job are given more weight when deciding on a person's suitability for further education and training.

8. Summary

❑ Post-Taylorist trends in work organization reduce the degree to which work is split into component elements and favour lean organizational structures with tasks being combined and flat hierarchies. The growing need for both broader and deeper vocational training can no longer be met solely by organized formal training away from the workplace. The consequences of lean organization for on-the-job learning are not wholly positive since increased working intensity cuts into learning time.

❑ Work-integrated learning brings with it a number of economic and pedagogical advantages so far as training is concerned. By combining learning with the practical application of what has been learned, it offers an almost ideal solution to the problem of transition from theory to practice, enhances efficiency and reduces costs because of the lessened need to release people for external training courses. For those groups of workers who traditionally have benefited less from education the barriers to their taking part in learning processes and continuing training have been lowered.

❑ Work-integrated learning is not the same as continuing training within the firm, the most frequent form of continuing vocational training. Forms of informal learning at the workplace and on the job are evolving alongside more traditional methods such as in-house and external training courses and seminars. They lie somewhere between the two extremes of work and learning and the terms used are not standardized but vary with company philosophy and management strategy, even though they relate to the same or very similar things.

❑ A distinction must be made between functional learning by doing and the forms of work-integrated intentional learning, based on in-service measures. So far as the present practice and use of work-integrated learning is concerned employers and employees are largely in agreement that traditional forms of learning still predominate, particularly instruction by superiors or fellow-workers and induction. More recent forms of training such as quality circles, exchange programmes, job rotation and self-teaching are as yet not widely used.

❑ The various forms of work-integrated learning are multifunctional instruments for personal, organizational and corporate development. In addition to developing skills they may, depending on the type of learning involved, help to improve employee involvement, quality assurance, customer-orientation or organizational development. This multidimensional approach makes it undesirable from a company point of view that they should become too formalized a means of qualification.

❑ Functional learning through work is subject to conditions at the workplace that may either help or hinder the process. We must make a distinction here between general conditions at organizational level and the potential learnability of job content. Even incidental learning while on the job is often only possible when - as in the case of group work - organizational measures are taken that also include flexible learning times.

❑ Functional and intentional learning at work requires work structures that make no strict demarcation between working and learning. Such structures do not (yet) exist in many areas of company operations. And even where lean organization with increased learning opportunities have been adopted, the consequences for learning are ambivalent:

❑ A greater working intensity reduces time available for learning; outsourcing (including teleworking) makes it more difficult to obtain information and hampers cooperation. Concentration on the core workforce impedes access to learning for those on the periphery and excludes the unemployed. All this renders the demanding learning objectives set for work-integrated learning unachievable. Instead there is a risk of "lean learning".

❑ The further development of work-integrated learning involves considerations both of methodology and education policy. Greater clarity is needed in the case of both work-integrated learning and functional on-the-job learning regarding how they relate to qualifications and skills on the one hand and their contribution to company development on the other (statistics could be used for this purpose).

In the sphere of education policy it is a matter particularly of developing models for linking formal and informal learning into a network. This will involve a rethinking of the course of a person's life, training and professional career, wage-earning activity and leisure time so as to allow for the need for lifelong learning.

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trends in working conditions → → →	Implications for Learning
• integration of tasks • flat hierarchy	quantitative and qualitative increase of learning requirements
group work	more co-operation and communication methodological and social competences
outsourcing	less contents-learning more difficult co-operation
just-in-time	reduced periods for learning
teleworking	less informal communication
core workforce/peripheral workforce	different forms to promote learning by employees
changing age and qualification structure	age-adjusted forms of furtherance of learning

aims and benefits of work-integrated learning
improvement of transfers
reducing employees on training-leave decreases costs
redistribution of learning periods
increase of motivation (especially for unqualified persons)
more demanding learning targets (to promote and develop competences)

Supply and demand of sub-forms of work-integrated learning		
	participation of enterprises	participation of employees
instruction on the work floor by superiors and specialists (coaching)	41 %	16 %
adjustment to work induced by technical-organisational changes or by the introduction of new technologies	35 %	5 %
adjustment to work for new employees	30 %	10 %
exchange programmes with other enterprises	4 %	14 %
job-rotation	4 %	3 %
'Lernstatt'	4 %	4 %
quality circles	5 %	3 %
self learning by means of distance learning, audio-visual means and computer aided learning	17 %	3 %

Profile of work-integrated learning
multi-dimensional instruments
differentiated profiles and functions
lesser degree of formalisation
work and learning

Informal learning
intentional and functional learning
favourable and non-favourable working conditions for learning
general conditions and learning potential of work tasks
group work

Risks and chances
tayloristic working conditions
outsourcing of work tasks
reduced chances of entry
exclusion of unemployed persons
building up a network of forms of learning
certification of qualifications and competencies

Perspectives of work-integrated learning
transparency • individual qualification • organisational development • participation of employees • inquiry of needs of further training
typology of favourable working conditions for learning • development of benchmarks
combining forms of learning • 'dualisation' of vocational training • joining informal and formal learning • complex learning arrangements • combining initial and continuing vocational training

FRENCH TRAINING SYSTEM: REFLECTIONS

ALAIN DUMONT

1. Reminder of the tasks of the French training system

1.1 Company needs

- A sound basis
  - guarantee basic knowledge
  - guide and train in a family of occupations
- An occupational qualification
  - recognised by companies
  - seen as the first step in an ongoing process
- Behaviour necessary to acquire social skills
  - in private life as an active and responsible citizen
  - in working life as an independent individual carrying out and completing projects
- This seems to have to do with two radically different tasks

1.2 The task of developing personal and social skills

- This is a mandate established by French Society for the Education System.
- This is a fundamental task: to help all pupils to develop their full potential.
  For that:
  - Give priority to combating failure:
    - by guaranteeing basic achievement
    - by offering economic insight in particular in order to enable people to understand the basic mechanisms of our societies
    - by developing the behaviour required by living in a society
    - by organising guidance as the expression of a choice within the framework of a project
  - Guarantee the necessary foundations for learning an occupation
    - by identifying large families of occupations
    - by developing technological, scientific, legal and economic know-how and skills
    - by providing the conditions for successful occupational instruction and necessary career development
- Schools must refocus on these tasks
  - by diversifying their approach within the framework of compulsory schooling
  - by being responsible for their results

- by reversing their management methods in order to facilitate projects, innovations, teams, etc.
- by recognising their educational task

❑ Schools must be able to count on companies to
- participate in their guidance activities
- promote the (initial and continuing) training of teachers
  - in understanding how a company operates
  - in economic realities
  - in the management of human resources and skills

1.3 The task of vocational qualification

❑ Its characteristics:
- this task is justified by and has its roots in the company
- it must be organised in such a way that it can rapidly adapt to changes in companies
- companies must share responsibility for this task
  - upstream in the qualitative and quantitative determination of goals
  - downstream in developing skills and recognising qualifications

❑ Vocational training for young people is the first step in the process
- which must train a coherent group
  - by means of differentiated training
  - by means of continuing training
- which must facilitate promotion within the company
  - by showing young people and their families that not everything takes place at school
  - by identifying and enhancing the successful paths within the company

❑ Vocational training for young people must be undertaken in training institutes
- which promote the link between the company and training venue
  - by means of alternance
  - by offering practical periods of training in the company
  - by the mobility of trainers
- whose management and organisation are close to company practices. Behaviour cannot be taught; it develops by doing it (example: where is enterprise and risk-taking learnt today?)
- which accept that the company's needs take priority over the needs of training bodies
  - which means that the person who defines the policy is not the person who runs a training system
  - which means that we accept the concept of the market; i.e. the concept of bidding and free competition

2. The principles which guide our reflections on vocational training

2.1 A working method

- to identify long-term guidelines (with one constant: taking companies' needs as the starting point and not the defence of training schemes),
- to take short or medium-term decisions on the basis of those guidelines.

2.2 Basic strategies

- To consider vocational training in its totality, thus to bring initial vocational training closer to continuing training, seeing this as the first step along a path
- To ensure that labour market demand prevails over the pressure of the training supply
  - to guarantee the independence and supply the freedom of choice:
    - of the State and regions vis-à-vis public bodies
    - of the company vis-à-vis its collector
  - to place training bodies in a true market context
    - equality in fiscal terms
    - equality in management rules
    - clarity on the markets
  - to move towards "the training company"
    - it should be adaptable, reactive and innovative
    - it should develop the corporate spirit in its staff and trainees
- To focus on occupational competence
  - for training is just one way of doing this
  - the management and development of an individual's skills must become a priority task
- To reconsider validation:
  - the diploma recognises
    - a level of development
    - the common bases for a family of occupations (production, management, administration, purchasing-sales, health occupations, etc.)
  - the qualification validates occupational skills recognised by companies as part of an individual's capital (skills pass)
    - it cannot be issued by trainers
    - it is separate from training
    - people can acquire skills from other sources than training
- To facilitate entry into companies by fighting the race for diplomas and then making employees responsible for their skills capital:
  - a paradox:
    - priority is given to the maintenance and renewal of the production tool
    - does occupational medicine take into account the health of the individual, which helps the employee to manage his skill capital and to let it bear fruit?
    - need to envisage a mediation function between companies, training bodies and employees when necessary
    - need for negotiation taking into account both the plans of individuals and their development prospects within the company
  - the earlier one joins a company, the more one should be able to benefit from differentiated training (drawing rights for a possible resumption of training leading to a recognised qualification),

- two goals must be stressed if we want to make progress along this path:
  - the development and implementation of individual and occupational plans
  - acquisition, management, tapping and transmission of skill capital

3. Study of specific points:

3.1 Orientation and occupational plans:

This is an activity which should accompany the individual from college throughout his working life. It aims to make the individual independent by giving him the means to create and carry out his occupational plans.

- A distinction can be made between several stages:
  - information on company functions and occupations, and meetings with experts from college onwards. The acquisition of a project methodology which will be used throughout life,
  - the creation of a personal and occupational plan, the result of ongoing negotiation between an individual's aptitudes and tastes, the skills expected in the given occupation and job prospects,
  - the choice of a large family of occupations (sales, production, administration, management, health, etc.) to create the necessary foundations for occupational qualifications,
  - a minimum balance on recruitment between individual plans and company plans,
  - management of the individual's occupational career preferably using his skill record.
- The role of professional organisations:
  - to participate in the training of college and school teachers in order to enable them to get to know the company, its main functions, its form of overall management and its management of human resources,
  - to report back to pupils in colleges and schools in order for them to encounter, thanks to the direct contacts, company employees, the diversity of their paths and the passion which the entrepreneurial spirit can encourage,
  - to organise the reconciliation of company needs and young people's plans in order to facilitate the signature of apprenticeship or alternance contracts,
  - to be on the spot whenever there is a need to present the company's occupations (it is far better to listen to the testimony of a professional person who loves his trade rather than the pedagogical tourism which some people practice).

3.2 Diplomas and qualifications

- The diploma:
  - recognises
    - a level of mastery of fundamental knowledge
    - the knowledge required for integration into a family of occupations
  - comes under the responsibility of the State.
- The qualification:

- It is based on
  - mastery by the individual of a set of applied competences (know-how and skills) and identifiable occupational behaviour, (example: to facilitate, organise, communicate, take action and carry it through)
  - responsibility of the company: mastering flows and contents which it, alone, can assess,
- If the employee is to organise his own occupational path, the qualifications must be:
  - identified by companies and listed
  - constantly updated in line with technological developments,
  - validated by the occupational sector with the assistance of multi-disciplinary experts

❑ Towards paths leading to recognised qualifications:
- The State must transfer responsibility for training leading to recognised qualifications to the regional councils (supervision) and to companies (contractor),
- Within the framework of the occupational branches, companies must:
  - define qualifications (skill references)
  - guarantee the validation of achievements independently of training
  - lay down the rules for the recognition of skills and occupational behaviour by companies (skill portfolio).

3.3 Initial vocational training:

❑ Educational diversity is the best response to the diversity of individuals. All single models are reductive.

❑ The corporate spirit cannot be taught; it develops in a given situation. The management and organisation of vocational training institutes must be impregnated with the corporate culture. This is the only way of developing the entrepreneurial spirit amongst young people.

❑ The true pedagogic of alternance are only taking their first faltering steps. Experiments on the ground must be undertaken, monitored and assessed.

❑ A Law on initial vocational training (on the same scale as the Debré law of 1958) should allow public and private institutions to be involved in the process of occupational qualification by rethinking everyone's roles, the functions, the statutes, the organisation and financing of institutions, by placing them more clearly on the training market: this is the only way of allowing them to rapidly adapt to the changes in the world of work.

❑ We should ensure that training programmes have less effect on the choice of policies by giving companies and professional organisations the means of precisely defining their needs.

❑ It would be very good to distinguish between the role of contractor and project manager. This would enable:
- the representatives of companies to define their qualitative and quantitative needs,
- the regional councils to define the regional plan against a backdrop of regional and local development,

- training bodies, public or private, to respond to the needs expressed.

❑ On the national level the State and the social partners guarantee the coherence and smooth running of the system.

3.4 Differentiated and continuing vocational training

❑ A single objective:
- to make employees responsible for their skill capital by enabling them:
  - to identify: skill references,
  - to measure and validate: replacement of skill assessment centres (static) by skill enhancement centres (dynamic), independent of training bodies,
  - to develop in the course of time.
- to promote training which develops occupational skills which could then be validated.

❑ To adapt schemes:
- In respect of companies:
  - to improve the fungibility of financing
  - to validate the skills acquired during training
- With regard to employees: the training-time savings account
  - reserved for training leading to a recognised qualification,
  - attached to the employee himself,
  - enabling him to accumulate time for training (in accordance with detailed rules which have still to be defined),
  - obligation to use the training time saved up within a period of 5 to 7 years
  - right to the prior validation of occupational skills acquired in a work situation at any time.
- For young people leaving the school system below level III, differentiated training:
  - drawing right for a maximum of two years (training voucher),
  - partial or total exemption from social security contributions for some groups.

❑ To adapt financing to the goals:
- The State finances (with European support if necessary)
  - the training voucher (pedagogical costs) for the differentiated qualification of young people below level III,
  - exemption from social security contributions for employees undergoing training leading to a recognised qualification,
  - some activities undertaken on behalf of EDDF for specific groups.

- The companies:
  - obligatory earmarking of 0.2% (ex-CIF) of funds for the financing of training leading to a recognised qualification for employees,
  - sharing of the 0.4% alternance, depending on the branch agreement, between the company and the continuing training leading to recognised qualifications for young people.
- The trainees finance all or part of their remuneration during training leading to a recognised qualification with their time saving account.

❑ A true training market
- to guarantee companies free choice in their training body,

- to eliminate distortions of competition by placing each service provider on an equal footing particularly vis-à-vis the tax system.

CONTINUING TRAINING: "A CONFLICT AND A SOLUTION"

BLANCA GOMEZ

There are some points that need to be made, however obvious they might seem. The first is that a firm is created and exists in order to make a profit. The second is that to do so it has to adapt to the needs of constantly changing markets. The third is that most firms are small and many of them act as subcontractors to medium-sized or large enterprises. (In Spain, for example, 45% of people in employment are in firms with fewer than 25 workers, two-thirds of which have come into existence since 1992 under the impetus of a rapid process of outsourcing by large firms).

All this has its consequences when it comes to continuing training. Most small firms have to adapt to the changing circumstances of larger firms and this duly affects the kind of training they give their workers. But the large firms do not usually demonstrate any great qualities of leadership and do not include in their strategic planning for skills and continuing training the complex, diffuse and growing network of small firms to whom they subcontract. At the same time, the independent small and medium-sized enterprises regrettably do not join together in order to study the market or organisational trends but content themselves with ensuring their daily survival.

As a result training is limited (and planned by consultants or educational establishments that do not conduct previous studies of needs). It also tends to focus on the firm's permanent employees, who are themselves becoming rarer - in Spain 40% of people in SMEs are employed on a casual basis.
Add to all this the fact that where training programmes do exist in the medium-sized or larger firms they tend to aim at achieving immediate results and be concentrated on those employees who, as they themselves put it, "are more profitable". We must therefore conclude that training is a complex area involving a variety of aspects such as the survival of the firm itself, job conservation, career advancement and improving the standard of living.

There are two ways out of this situation - conflict and dialogue. We believe the second to be the better one. We also believe that training is a subject offering broad scope for a dialogue capable on the one hand of assuring the right of all workers, male and female, to safeguard and improve their job situation whilst at the same time sharpening the focus for an analysis of firms' training needs.

To be successful this dialogue needs to be conducted at five levels:

- **At the level of medium-sized or large firms,** so that they can build into their strategies for innovation provision for the new qualifications that will enable them to achieve their objectives. The forum in which this transparency, necessary at any stage of a firm's development, is best discussed is that of collective bargaining within the firm with the training programme being agreed between the employer and the workers' legal

representatives. These in Spain are a single representative body elected by workers within their firms. We have to rise beyond the level of merely informing to one of bilateral planning. If today we use the term "self-qualifying organisation" to describe training based on the responsibility of the individual within the group (who must to this end understand the strategy, structure and culture of the enterprise, where learning about the organisation is fundamental) and which must be permanent, global and context-related, one cannot keep the workers' legal representatives on the sidelines of discussions concerning a firm's organisation and its consequences for training.

❑ **At sectoral level**, in order to guide and set the priorities, especially of SMEs, and do away with the standard training programmes that serve little purpose. The joint bodies at sectoral level must look into the question of needs here and now, but also make projections for the future. Such joint bodies have a vital guiding role to play in the case of smaller firms whilst at the same time guaranteeing a policy of training for most workers employed by them.

❑ **At regional level**. Joint bodies at regional level, which may also be bilateral, should foresee cross-sectoral needs for the training of workers in their area and collaborate with the bodies doing the actual training to encourage adjustment to changes in the various sectors of industry - such as the disappearance of a fabric of manufacturing in one sector, the emergence of jobs in another or prospects of diversification of economic activity.

❑ **At national level**, from a structure outside the firm that dynamically identifies needs and skills, acts as a link between the training subsystems and as a point of reference for determining vocational qualifications in collective bargaining. In Spain we would wish this mediating body with a tripartite composition of government authorities in the fields of education and labour, employers and trade unions, and provided with sufficient technical support to be called the **"National Institute for Qualifications".** It would therefore appear of fundamental importance to create an institutional framework linking the needs of firms with the directing of vocational training, especially at the continuing training level. This is particularly important bearing in mind one of the conclusions of CEDEFOP's own research, namely that although the new organisational trends are leading to a change in qualifications considered individually, there is a growing call for cross-skilling in training and for workers at the various levels. This fact makes clear the need to link initial with continuing training and both with specific in-company training, be it formal or informal, through participation in policies for directing, managing and constantly adapting the training subsystems and in the evaluation of new organisational trends and firms' requirements.

❑ **At European level**. Furthering the frustrated initiative for convergence through a system of recognition and validation of vocational qualifications in the Member States. For this to become reality it would be necessary to strengthen CEDEFOP's role as the institution responsible for devising, in agreement with the Member States and the social partners at European level, a methodology for identifying training needs (on the basis of information supplied by the national authorities) in order to establish the appropriate parities.

These five points are a preliminary condition for assuring most firms wishing to develop the necessary skills in their workers a level playing field; this includes those SMEs which, due to their limited financial resources and their subordinate position in the production process compared with the major multinationals, are

position in the production process compared with the major multinationals, are unable to act independently in planning their needs for a constant updating of skills. The systems of training for employment require this "extra-company" structure to act as a permanent and dynamic pointer to firms' skill requirements, as a link with the training subsystems to enable them additionally to adapt to on-the-job learning processes and as a direct point of reference for determining vocational qualifications in collective negotiations.

CONCLUSIONS AND THE DEBATE SO FAR

JACQUES DELCOURT
& JORDI PLANAS

1. Introduction

The aim of these conclusions is not to provide a summary of the contributions and discussions in the second AGORA THESSALONIKIS. The rapporteurs' task is not simply to reiterate what was said or questioned in the discussions. Rather it is to reconstruct and sum up the various problems raised and the questions discussed - those that remained unanswered and those that could usefully be considered in greater depth. The objective is also to find the areas of consensus and dissent among the experts and indicate directions for future research and action.

First of all we should make it clear that these conclusions were arrived at in a open discussion and do not necessarily reflect CEDEFOP's views or policies on the subject. In the first part, we shall respond to the appeal by the experts by calling for prudence and discrimination in interpreting the trends. On no account should we adopt a unilateral, simplistic view of development. We shall show the experts themselves always reasoned in terms of trends and counter-trends.

In the second part, we shall analyse the position and reasoning of employers on their role in training, especially lifelong training. Obviously these are the views as perceived by all or some of the experts. In the third part, we shall discuss the effects of economic realities on the employer's decision as to the effort and expenditure to be devoted to training all or part of its workforce.

The fourth part is an analysis of the effects of workers' expectations of and demands on the way the employer defines its training role. In the sixth part, we develop a set of prerequisites and logistic functions that are vital to the effective development of the training role in the workplace. In the fifth part, we reflect on the scope of the social forces involved in the development of continuing training in the workplace and, more broadly, within a cognitive society.

2. Trends and counter-trends in training

From the start, the experts at the second AGORA THESSALONIKIS declared their belief that it is the mission of employers, individually or as a body, grouped by function (in their supplier/customer or principal/sub-contractor relationships, for example), or at sectoral or regional level, to contribute to the lifelong training of the workforce. They felt that training is a necessity for enterprises, and is one of the main ways in which employers should

combat the loss of knowledge and skills, organize change and adapt and improve skills to meet their own operating and development requirements in a constantly changing economy and society. But although this essentially met with the consensus of the experts, they also differed markedly in their assessment of the current situations and evolutionary trends, in their diagnosis and prognosis of the role performed by the enterprise in lifelong training, and in the policies to be applied in this field.

2.1 The effects of competition on skills and training

According to some of the experts, organizations that have to compete with others must rely more and more on individuals' knowledge, intuition, planning ability, imagination and creativity. They need to train their workers continuously. Other experts feel that fierce competition makes employers look for immediate productivity and short-term competitiveness and profitability. Under such conditions, an employee may find himself out of work at any moment and relapse into unemployment, and employers may expend only minimal effort in the field of training.

At the risk of wearying the reader, we should right from the start stress the difficulty of describing trends without immediately introducing divergences arising from the different economic and social contexts in which those trends take place. For example, the tendency to provide training in the workplace is fairly well established, but it is more marked in countries such as Germany, where the social partners have long agreed on the negotiated development of on-the-job training. In France, on the other hand, where a tax is levied on employers to finance continuing training, many have preferred to pay the tax and look outside for training rather than provide it themselves. In the UK, the existence of trade unions and professional associations tends to work against the in-house provision of training. In the same way, the number of people who are trained in the course of their work will differ from country to country, but in general it is found that it is the least skilled who have on-the-job training. More highly qualified workers with diplomas will be more likely to go on outside training courses. Even so, the role of the workplace in training is growing in every country, because this is one of the vital methods of organizing change.

2.2 Integration of training in the workplace or outsourcing

A fairly large group of exerts believed that there is a clear shift towards in-house training and therefore a preference to create an internal skills market, mainly due to the growing specialization of products and production and the need to develop collective intelligence within the enterprise. Other experts stressed the trend towards externalizing workforces by recourse to sub-contracting, establishing relations between suppliers and their customers and outsourcing training. Large concerns, they argue, tend to redevelop in the form of profit centres or a networked chain of small or medium-sized enterprises. But smaller units are more inclined to look outside for the training of their workers.

Various situations may also make employers resort to the outside market and not become bogged down in managing an internal skills market. This is generally the case with small enterprises, but it also happens in larger concerns, which prefer to recruit young diploma-holders from outside, or people with a higher standard of education. Experienced workers without paper qualifications, or whose experience is not attested by certificates – generally the older workers – tend on the whole to be more closely tied to their employer. In interpreting the developments, then, the effect of generations and the process of possible substitution of older by younger generations should be borne in mind. Lastly, other

employers opt for creating an internal skills market and developing the essential training efforts to this end. These are generally the employers using specific knowledge and expertise.

2.3 New forms of organizing work and training

Certain experts felt that we are moving away from Taylor-style principles of the organization of labour and embarking on forms of work based on job rotation and job enrichment. As a result, they believe, we are relying on multi-skilling, autonomy, the capacity to adapt and take the initiative and a greater sense of responsibility on the part of the worker or work group, collective intelligence and the highlighting and practical application of a broader range of individual and group qualities. Other experts consider that the introduction of requirements, such as 'just-in-time' in relations inside and outside the workplace is recreating working conditions which they have no hesitation in defining as 'neo-Taylorism'. They also point to the growth in non-typical forms of work, the wide diversification of contracts of work or employment, the hybrid forms of workers' status and the breakdown of collective labour into a multiplicity of categories with more or less temporary status, which the employer does not generally take the trouble to train.

2.4 Training in the workplace: a paradoxical injunction

Some of the experts saw continuing training in the workplace as a paradox. They pointed to the contradiction between the need for continuing training expressed by many employers on the one hand and, on the other, the requirements brought about by ever keener competition, low growth, 'just-in-time' production, the networking of enterprises and the flattening out of organizational hierarchies, with the practical result of lessening the opportunities for promotion.

Some experts were convinced that the role of the workplace in workers' continuing training is bound to grow. Others felt that employers' fine words about the need for continuing training are not always borne out by their actions. According to the former group, a series of developments is working in favour of the employer taking on an ever greater role in the lifelong training of workers. They have noted a widening gap between education and training on the one hand and, on the other, employers' needs and demands for knowledge and competences. They recognize the urgent demands imposed by ever keener competition within an economy in the course of globalization, as well as the mounting pace of financial, economic, scientific, technological, information, communications and organizational change.

These experts argued that, because of the growing number of enterprises that focus on change and are committed to a constant process of innovation, there must be flexible links between their various functions – innovation, qualification, guidance and training – although those functions may not necessarily be performed internally. In such circumstances, a skill is never acquired once and for all.

A continuous process of adapting competences is called for, and it is only normal that employers aiming an innovation and qualification should seek to analyse and predict developments in production and technology, and of course in competences and jobs as well. Faced with these developments, they have an obligation to constantly promote training, adaptation and retraining, or even vocational and sectorial migration through, for example, 'outsourcing'.

But there was another school of thought: here the experts interpreted developments in different ways. They thought that the networking of enterprises and, in this context, the enterprise's acceptance of the 'just-in-time' principle do not really give them the opportunity to become involved in initiatives for the continuing training of their workers. Furthermore, many firms are too small to assume on an effective training role. Another factor is that not every employer necessarily has the desire or the expertise to train its workers.

Lastly, if employers hope to perform this role of lifelong training effectively, and thus meet the challenge posed by the steady rise in the demands of those entering a field of work, as in the course of active working life, certain conditions have to be met. There have to be links and alliances and synergy among enterprises, as well as between enterprises and a variety of outside bodies. The role of the enterprise in lifelong training does not stop at its own gates. Continuing training can usually be developed only in cooperation with outside agencies - public or private - and with the government.

2.5 Training and social forces in the workplace and in society

Up to this point, according to the experts, continuing training has been the subject of peaceful dialogue between the two sides of industry, both locally and at European level. This does not mean, however, that the tensions and conflicts will not proliferate in the future with the broader awareness of the challenge of such training. Whether continuing training is a matter of conflict or consensus in the future will depend on the strategy adopted by enterprises and employers' associations faced with paradoxical demands: at any time they may be confronted with contradictions arising from their desire to build up and retain the competences they need for maintaining their competitiveness over a period of time, but simultaneously they must be flexible enough to compete. Consensus or conflict in the field of continuing training also depends on the strength of workers' organizations and their future capability to coordinate and cooperate on common goals at European level. This means that more research in the field is needed before we can say whether the overall trend is really towards a cognitive and therefore an education and training society.

3. Employers' reasoning in favour of their training role

Following the liberalization of markets and a whole series of technological and scientific revolutions, the pace of change in the industrial world has accelerated and the pressure of competition is ever greater. The management of competences has become a vital need within enterprises, as it is in the country as a whole. Employers, individually or as a group, cannot sidestep the challenge of lifelong training. But will they face up to that challenge? Although they have a responsibility for such training, it is inevitably shared. The problem that then arises is how to achieve a fair and proper distribution of responsibilities between employers and other public and private bodies working in the field of basic education and continuing training.

Overall, it may be assumed that employers are aware of the importance of training, especially for people on work placements, apprentices and new recruits, as well as of their workforce. Their competitiveness, productivity and profitability depend on training. But the question is whether they are interested in training workers throughout their lives, particularly their working lives. Or, more simply, are they willing to take a sufficiently long-

term view of their training programmes? The interest they express in workplace training is motivated above all by the growing gap between theoretical training (provided by the school) and practical training (provided in the workplace). Today, the conditions under which general and basic vocational training is provided seem to be further and further removed from the production conditions in workplaces, irrespective of size – small, medium-sized or large.

Besides this demarcation between the educational system and the demands imposed by economic and social development, however, there are other reasons for employers' growing concern with lifelong training. We shall be taking a closer look at these reasons, but the first issue that arises is the sharing of responsibilities.

According to Alain Dumont, everyone should stick to their own trades. Roles in training should be clearly shared. Schools and training bodies should be responsible for imparting the basic theoretical knowledge and both working and social skills. Employers should have the role of gauging people's real value through work and practice. It is the employers who recruit and who determine the skills that can be used, whatever titles or diplomas may have been acquired elsewhere. They are the ones who have to use the knowledge and skills and determine which they will retain or reject, and the practical use that will be made of them, refining them through apprenticeship, experience and testing in work situationsn if necessary.

As Alain Dumont points out, the employers – the main users and the end users – should also tell the outside agencies precisely what they want and what they think about their products. As consumers, they are also the best judges of the abilities and competence acquired at work and through continuing training. They should be the ones to certify skills throughout life, or at any rate they should take an active part in such certification.

3.1 Complaints as to the inadequacy of basic training

Employers are aware of the importance of practical training, especially of the people coming onto the labour-market for the first time fresh from their studies. They also strongly criticise the widening gap between secondary and higher education, not only vocational and technical but also university, and the practical demands of economic and working life. According to Alain Dumont, employers often speak of 'over-education' or, to adapt the term coined by Valeriano Munoz Lopez, 'title mania'. They complain that the various branches of learning produce too many diploma-holders. The reason, or at least part of the reason, is the over-generous funding of studies. This promotes a demand for training among young people that reflects their dreams rather than the realities, and encourages them to opt for courses not geared to the practical demands of work and job opportunities.

In education, the training provided responds to the demand expressed by young people, their aspirations and their interests rather than the demand for diploma-holders on the jobs market. In this context, employers complain of young people's disorientation, or even their 'misorientation'. They consider that, at various levels, the study paths chosen are inappropriate. For instance, it is not unusual to hear complaints about young people lacking guts and being unable to make a proper choice of career paths. Often left to their own devices at the time of opting for secondary vocational, technical or further education or even university education, young people made wrong choices and are therefore not trained for the job areas of the future. The evidence is to be found in the difficulties that

diploma-holders encounter in finding work or meeting the demands of the jobs and careers that in theory are open to them.

The low employability of diploma-holders, however, is not merely the result of having made a poor choice or having been misdirected. It is also due to their studies being unsuited to the practical working and development requirements of jobs and callings and of employers. For example, even when young people have chosen the right areas of work, employers complain of the many gaps in their basic scientific, technical or vocational training. All too often no links are established between the educational aims and the operational aims pursued at work, in production and by employers. This being so, the pool of unemployed and unemployable diploma-holders is growing.

Along the same lines, the educational system is accused of being unable to avoid or circumvent the setbacks that cause young people to flounder, leading in turn to the creation of new agencies to cater for and train them. Those agencies could stigmatize the young people, especially when they are there because they have been excluded. This, according to Alain Dumont, creates a need to review basic training and socialization and give more thought to developing competences on several levels: working, behavioural and social. In day-to-day work, it is not enough to be competent in your job, in theory and in practice: you also have to demonstrate the ability to learn, to think in the abstract, to manage, innovate, monitor and command. You have to show yourself capable of sharing and cooperation, and to display sufficient commitment to the projects and objectives in your undertaking. It would be hard to imagine such abilities and qualities being developed except through practice or anywhere except in a working situation. But the problem can be solved only if employers decide to open their doors wide to trainees and if they agree to launch out on the continuing training of workers.

This creates a pressing need for functional links between schools and public- and private-sector enterprises, not just to promote the quality of basic vocational training but also of the continuing vocational training of the workforce. There must be an urgent quest for new alliances to generate momentum and for synergy between the economic and financial world, the world of work and the workplace on the one hand and, on the other, education and training as well as research, while trying to ensure that none of these worlds feels itself subject to the others.

This has led to the wish to involve training agencies and officials and representatives from the worlds of education and training in bipartite negotiations (between the two sides of industry) or tripartite negotiations (the social partners plus public authorities).

3.2 New responsibilities for the management of skills

The growing concern of employers about lifelong training has other reasons besides this divide between the education system and the pressing development needs of the economy and society. During the discussions, we were reminded how the faster pace of technical change, the growing competition following the liberalization of markets and the continuous restructuring of enterprises and networks of enterprises, as well as decentralisation of decision-making and initiative, are constantly raising the minimum requirements, not only on entering employment for the first time but also throughout working lives. In an economy beset by what has become worldwide competition, companies have been drawn into a 'just-in-time' production system. They set off in pursuit of novelty and quality; they seek diversification of the range of their products; they are on

the lookout for technological novelty and new methods of organization. A growing number are focusing on the production of information for themselves or for others. To do so, they constantly have to step up their efforts to train their workers, whether inside or outside the enterprise or network of enterprises. Employers have an inescapable role in the training of those entering the workplace and subsequently their continuing training. In our advanced economies, the management of skills and the constant development of human resources are becoming an imperative in the workplace, as in the rest of the country.

3.3 Continuous adaptation of qualifications in an economy based on constant innovation

The only way to face up to the growing competition in the more advanced societies and the world as a whole is by developing research, mobilizing the intelligence of individuals and groups, introducing ever more innovations at an ever faster rate, changing the methods of organization and cooperation – in other words constant adaptation and restructuring of the human resources available to the company. In reality, innovation occurs at every level: economic, financial, scientific, technological, organizational and in information and communications.

Change in the organizational approach is reflected in a transformation of the approach to work. It triggers off the process of 'creative destruction' to which reference was made in the introductory note to the AGORA. On the one hand, this process leads to the destruction of segments and whole sectors of activity, in other words to the disappearance of jobs, as well as to a loss of perceived value in skills, crafts and professions and therefore to their downgrading and a loss of identity and status for many workers. On the other hand, this process fosters the emergence of new enterprises and activities, and therefore the creation of new jobs and occupations, as well as new definitions of professions, vocational titles, identities and categories. In turn this leads to new criteria such as multiskilling, learning capacity, a sense of initiative and the ability to innovate, and even to cooperate.

Several experts, including Jean Daems, mentioned how the new professions had to be stretched to make them fit - or not fit - into the traditional classifications. This process of 'destruction-creation' would be inconceivable without flexibility and mobility on the part of workers. These are qualities that usually entail further training and new forms of learning in or outside the enterprises or networks of enterprises.

As already stated in the introduction, the twentieth century has experienced many changes that have repeatedly launched similar processes of destruction and creation in the structures of economic activities and employment. In just over a century, we have moved from being an agricultural to an industrial society and then, from 1965 on and as a result of the movement towards de-industrialization, to a 'service' society. But already the slimming down of workforces has started in certain major service sectors such as banking, insurance and commerce. European bodies are already talking about the coming of an learning and cognitive society, an information and communication society, a society in which non-tangible production is overtaking physical production, in which cultural and leisure activities and industries are booming.

The rapid shifts in the structure of activities and jobs are accompanied by the dismantling of skill structures and by restructuring. These are the reasons why so many working men and women feel themselves under threat of unemployment or have already been made redundant. As a reminder, in 1997 the number of unemployed in European Union

countries was reported to be 18 million. This means that flexibility and mobility have become an essential factor in the working lives of a growing number of men and women. Large numbers of workers are forced to accept migration between sectors and regions, sometimes even between countries in the EU and elsewhere.

Several experts, however, took a more cautious view of transnational geographical mobility within the European Union and the world. In general, they said, labour is geographically less mobile than capital. For example, today the number of intra-European migrations is decreasing, as is the rate of expatriation outside Europe. The expatriation of more senior staff is becoming increasingly costly for companies and as a result they try to recruit locally wherever they set up in the world. Lastly, the only forms of worker migration that are on the increase in the European Union are those of low-skilled workers and people from non-member countries.

Even though intra- and extra-European migration is still low and has been on the decline over the last few years, except perhaps in frontier areas, a steadily rising number of workers have to cope with several processes of adaptation in the course of their working lives; they have to refresh the range of their knowledge and skills, and therefore to undergo thorough retraining. It is hard to imagine the various changes taking place within enterprises being restructured without embarking upon financial investment in adaptation and retraining.

The restructuring of organizations entails removing the partitions and creating synergy between departments and also between those engaged on product and process research, innovation and development, production and marketing on the one hand and, on the other, between those functions and the guidance and skilling of the people caught up in the process of change. In the same way, the successive restructuring of organizations calls for a search for opportunities for 'outplacements' and investment in training and learning, so that redundant workers can be placed in other enterprises.

Nevertheless, as many speakers said, it has to be accepted that employers are somewhat reluctant to embark on major spending and investment in such readaptation, transition from one job to another and 'outplacements' caused by industrial conversion and restructuring. If they do, it is because they are obliged to do so by government or by industrial disputes and collective bargaining leading to the adoption of social plans.

3.4 A delicate question: the role of the employer in combating unemployment and training the unemployed

Because of the high cost of labour, employers are adopting high-performance technologies and labour-saving forms of work organization. The result has been slimmer workforces, with the less qualified suffering the most.

During the AGORA, we were reminded on several occasions that, with the acceleration in technological progress and the increasingly capitalistic nature of enterprises, there is no certainty that the new growth sectors will be enough to provide work and jobs for all those made redundant by downsizing and restructuring in the traditional sectors. Nor is there any certainty that firms in the new sectors are more open to alternance training for the workers made redundant in the traditional sectors or for the long-term unemployed.

This means that the more advanced societies experience a shortage of jobs, which cannot be overcome in the short term unless deliberate efforts are made by Governments and the social partners.

Under these conditions, and in the absence over comprehensive employment policy, the benefit of the provision of lifelong training by employers will ultimately go only to the working population in employment, unless – in return for special incentives – they agree to help with the training and employment of the unemployed.

As Edgar Sauter pointed out, if we are not careful, the unemployed will be excluded from the forms of apprenticeship in the workplace. The longer the period of unemployment, the harder will it be for the unemployed to have access to in-company training. The longer their period of unemployment, the greater their risk of being directed towards training centres outside the workplace. This is why it is so desirable for employers to be more open to the less qualified and long-term unemployed. It can be done only if employers are aware of the need to prevent the polarization of society and of the urgency of reducing the negative effects, in terms of consumption, which entail higher unemployment and more marginalized groups.

Concern to train the jobless and those excluded from the labour-market and return them to work is all the greater as their growing numbers and declining purchasing power could in the end affect consumption. In this field it is in the interest of employers that policy on employment, development and the adaptation of human resources should be considered in a broader context than the enterprise.

4. The impact of the economic rationale on continuing training

4.1 Definition and demarcation of the employer's role in training

How should the training role of the employer be defined? What does it include? If we agree with Peer Kristensen and Edgar Sauter that all work is training in one way or another, then all employers provide training and skills. They train and impart skills to workers through the day-to-day solving of the many problems that arise in the course of work or in a work group or project team, as well as in all the functional relationships entailed in production. If this is the definition of training, it could be said that all employers provide continuing training to their workers. There is no doubt that work develops not just occupational but also social skills and knowledge. Without denying advantages and the strategic importance of such informal forms of learning, which are often overlooked, and while accepting that such learning and experience are too often disregarded when it comes to selecting workers and giving them access to specialized training because the holders of formal qualifications are still preferred, it is clear that in the context of the enterprises, when people talk of learning and lifelong training they are clearly thinking of more structured forms of the transmission or generation of knowledge, expertise or behavioural skills in the working relationship with others, both at and outside work.

Without in any way dismissing the importance of spontaneous forms of learning, the main issues in the development of lifelong training are obviously these structured, planned and organized forms of training – alternating, inside or outside the workplace. These formal types of recurring or continuing training and learning are reflected more specifically in

costs in that it is easier for firms to put figures on their training expenditure and investment.

4.2 The financial implications for the employer of the development of training

In-company learning and training does not involve only costs and expenditure but also risks. In the longer term, competitors are bound to poach members of the workforce who have trained there. Someone taken on as an apprentice or as a worker to be trained will not necessarily succeed. And that worker may agree to make the effort to learn and train as required by the employer only if he can look forward to being rewarded by higher earnings rather than because his effort will improve the company's productivity, competitiveness and profitability.

When the employer agrees to become a formal trainer – unless it is receiving outside help – it is submitting, in the words of Alain Dumont, to an obligation as to the results, not just to an obligation as to the means, even though it is always easier to measure training expenses than the short-, medium- or long-term results and benefits. Whatever the field in which the employer in question operates, the rules of economic logic must apply and that includes training and management of cognitive, theoretical and practical skills. In decisions on training, for instance, it is only normal to take account of the duration and cost of training, the likelihood of the worker performing better as a result and also the period of time over which the employer may expect to benefit from the training imparted. The older the worker, the shorter this period.

This was also the argument advanced by Blanca Gomez. She began by pointing out that an enterprise is created and exists to produce profits and therefore, when it comes to apprenticeship and training, it will act as in every other sector of its life; it will take care not to depart from its economic logic. Of course, she writes, the enterprise is well aware that it has to adapt to the constraints and demands of constantly changing markets if it is to keep going and expand and continue to make profits, and that therefore it is vital to develop the training of its workforce. But not every enterprise has the financial or human resources to do this. Not all of them have the desire to train. Not every firm is willing to shoulder the difficulties and costs entailed in alternating workers between outside training, work and in-house training.

4.3 Why small firms may be reluctant to train

Blanca Gomez and Jean Daems stressed that most enterprises are small and that the proportion of small and medium-sized concerns is rising. Moreover, the large companies often opt for a policy of outsourcing training in order to reduce their wage bills and long-term commitments. This means that a growing number of small firms eventually provide services to or are sub-contractors for medium-sized and large companies. Since they are small, they have to comply with the demands of these customers or contractors. In drawing up their strategic plans, however, only rarely do the latter seek to integrate the qualification and training needs of the small firms that act as their sub-contractors or suppliers. The small firms are reasonably happy about training on the job but, as pointed out by Blanca Gomez, it is unusual for them to review and plan in the light of long-term requirements.

It is generally recognized, then, that economic redevelopment and in particular a revival in employment will come from the small and medium-sized concerns (those with a workforce

of fewer than 250). Their growth also depends on new ways of distributing work between large concerns and small and medium-sized firms by means of alliances, networking, joint operations, sub-contracting, joint operations, sub-contracting, cost-plus-percentage contracts, etc. But at the same time, all the available statistics reveal the reluctance among SMEs, even those with a very successful record, to shoulder the cost of training or of arranging for training. When they can, they prefer to recruit trained workers, particularly from among people made redundant by the large concerns. In fact, while SMEs would like to take advantage of workers who have trained through their daily work, they have to obtain those benefits through training measures adopted by their suppliers, principals or customers. On the whole, however, they will succeed in fulfilling a training role only if they come together with other firms in activities or centres set up for this purpose.

These considerations on the way in which SMEs envisage, or refuse to envisage, the training of their workforce are of strategic importance because they point to the need to rethink a training architecture and structures in the light of their requirements in term of theoretical and practical skills. Nevertheless, the discussion on the role of small companies in training has shown that differentiation is vital. A growing number of small firms are working with highly specialist personnel providing leading-edge services to other enterprises and they also aim to be innovatory and creative and, in parallel, the providers of knowledge and competence to their personnel. It is true, however, that such small leading-edge firms are far from being in the majority.

4.4. Economic limits on apprenticeship and training

The principles underlying the economics of training and the company's strategy in this field tend to lead to the provision of apprenticeship and training benefits and opportunities only to the workers most likely to succeed, and therefore to those who are already the best trained or most highly motivated to learn. It is a point made by several experts, in particular Edgar Sauter, Jean Daems and Blanca Gomez. The latter highlighted the discrimination against women in company training programmes. In fact, companies feel that not everyone is equally good for training. As far as they are concerned, it is generally less expensive to train the best trained, in other words those who have studied and hold diplomas. The benefits of training do not automatically go to those who need it most if they are to embark on the right path in their working lives. This proves that systems of in-company training are not necessarily the second chance offered to men and women who, when they were young, did not have the opportunity to engage in lengthy studies or who, for lack of sufficient financial resources or motivation, were relegated to dead-end jobs which stigmatized them rather than train them.

Various surveys have also clearly shown that the training opportunities offered by companies are expanding more for middle management and white-collar workers than for blue-collar workers, for skilled rather than low-skilled or unskilled workers, for men rather than women, for nationals rather than immigrants, for the young rather than the old workers, for full-time workers making up the core of an enterprise rather than peripheral workers employed part time or for a fixed term.

Lastly, unless a formal system for the recognition and exploitation of learning, experience and training of workers in the enterprise is set up, it is likely that the criterion of diplomas and education and training in the school will continue to be preferred to other criteria, usually to the detriment of the older workers whose basic schooling tends to be less advanced.

4.5 Research on profitable types of training

In a training economy, it is undoubtedly important to distinguish the rationale applied by the enterprise depending on whether the purpose of training is to adapt knowledge and skills, bring about change within jobs, retrain to facilitate a switch from one occupation or trade to another, or lastly to grant a promotion to a higher level of qualification or a higher step in the hierarchy. In its training role and strategy, the employer also takes account of the risk constituted by the potential mobility of its workers and the possible transfer of knowledge to other firms. Depending on its objectives and the circumstances and risks, an employer may decide to train its workforce on the job, through work sequences, in a group within the workplace or else on the premises of the suppliers of equipment or new materials, or the principal who wants the product or component that it is ordering to meet its quality standards, or finally by resorting to outside training bodies.

According to the experts, the financial considerations that govern the choice of apprenticeship and training opportunities in enterprises tend to promote the transmission of practical knowledge, the kind of knowledge that is easier to use and the more directly profitable. Alternatively, they favour the conveyance of specific knowledge associated with the company's own activity, in other words the least exportable knowledge. In general, theoretical and general information is transmitted only if it is needed for the subsequent acquisition of practical and work-related competences. From the employer's viewpoint, the advantage of focusing on the transmission of specific knowledge is that it cannot be transferred from one enterprise to another, or is less likely to be transferable.

The specific nature of the knowledge and expertise transmitted by the employer is no doubt also the reason why the employer is not very interested in certification. If the performance of a worker or group of workers is associated with specific workplace-related, skill audits and validation by the enterprise or social partners of the expertise acquired will not be of great value in the workers' mobility. One striking example was provided by Linardos Rulmond, speaking of Greece. He pointed out that there is a considerable amount of apprenticeship and training in petrochemical concerns, but the knowledge and competences acquired there, validated or unvalidated, certified or uncertified, cannot be exported to or used in any other enterprises in close or distant employment catchment areas.

4.6 Reconciling the aims of employers and operators

The role of ongoing training in the workplace is justified by the continuity of the changes occurring there – economic, technical, scientific, organizational and in communications. In this as in other fields, the choices are determined by the expected profitability of the effort put into training or by the support and grants obtained from outside or by the taxes levied depending on whether or not an employer assumes this training role. Nevertheless, the employer's economic calculations regarding workforce apprenticeship and training also take into account other factors, such as the aspirations and demands of workers, who posses some bargaining and negotiating power. This means that thought is given to the costs that might be incurred if the employer's options and demands were out of tune with the expectations of employees. The dissatisfaction that occurs when there is a mismatch between the employer's objectives and the workforce's aspirations has a cost. In the field of training, as elsewhere, there must be a compromise between the interests and expectations of the different categories of workers.

It was also pointed out in the debate that an employer's investment in training could also meet social demands and ensue from workplace or sector agreements. In certain traditional enterprises, for example, it is not unusual for promotion and category to be linked not only to scales and status but also to levels of training, knowledge or competences, along the same lines as in public sector administrations.

Following this line of reasoning, led by Jean Daems, the group debated the reasons that might lead employers to opt for certain types of training and fields of knowledge, such as language learning, group dynamics, personal relationships, customer relations or perhaps information technology or statistics. Similarly, the question was discussed why the service industries, especially in retailing, banking and insurance, tend to spend more on both internal and external training than manufacturing enterprises. By comparison with industrial concerns, companies in the sectors mentioned seem to be far more generous in their expenditure on training. The explanation for the differences might be found in the way they account for the costs of learning and training times, but it could also be that the differences in the aspirations and demands of workers for training reflect the extent of their basic education.

5. Workers and the development of the company's training role

5.1 Building up the right to lifelong training

As pointed out by Alain Dumont, it is the worker who has the ultimate responsibility for the steady build-up of his own knowledge and expertise. Taking the general view, lifelong training is of value primarily to the worker rather than to the private sector enterprise, especially as the latter is not, and has no wish to be, tied to its workforce by life contracts. An employer confronted with major economic or technological change, who therefore needs new competences, can usually choose between two strategies: its workers must adapt to the new demands, or it must look outside to the labour-market to find people who are already skilled. The choice will depend on a comparison of the costs and benefits and the time it has to manage the change. There is no certainty that the employer will prefer to adopt the former solution.

Even so, said Alain Dumont, attitudes are changing. Today employers are prepared, more often than one might imagine, to commit themselves to contracts guaranteeing that a worker will maintain his employability – something that should, moreover, be the fundamental responsibility of any company to those in its employ. Even though the worker may claim and obtain a right to continuing training, it is not unusual, as Philippe Defoin pointed out, for the demand for training to originate from the enterprise rather than from the workers, or from a dialogue between enterprises and outside advisers who visit the workplace and then help to formulate the demand for training. This poses the question of who determines whether there are in training gaps and what is needed, and in what context: skills audits, group discussions, negotiations with unions? But it also raises the question of the extent to which workers' expectations and aspirations are taken into account in mapping out and choosing training.

5.2 The right to continuing training: a response to unpredictability

The constant process of change in working structures, employment and qualifications to which we have already referred is the reason why workers have to be flexible and mobile. With the precipitation and accumulation of changes, it can readily be appreciated how chaotic the occupational path and career of a growing number of people can be, including the most highly skilled. Today, in the course of a career, people will frequently have to move from one job to another and face periods of adaptation, readaptation and retraining. Nowadays, unemployment is a recurring threat to workers at different levels of qualifications – not just the less skilled but also those with a diploma. Whatever his age and occupational status, a worker can see-saw from employment to unemployment, or may have to move from one firm to another and from one profession to another.

In short, workers know that jobs have become more precarious in a rapidly changing society. They also know that a dual labour-market and a deep-seated polarization of population groups based on their chances of work and employment are characteristic features of advanced societies. There are many who fear the shift from the familiar labour-market to untypical work. In the absence of contracts of employment for life and a reduction in the number of fixed-term contracts, in the absence of an actual right to work or contracts of employment including a clause on maintaining 'employability', recognition of the right to lifelong training is the worker's only guarantee of retaining his job or finding another, giving him and his dependants security for life.

From the worker's viewpoint, the right to lifelong training is as vital as a staff to a pilgrim. The right to continuing training and access to further guidance, readaptation and retraining means that he can pursue his working life while reducing the number and duration of periods of unemployment. This claim to the right to lifelong training obviously affects the role that the employer will have to play in its achievement. For workers, this right to continuing training is justified not only by the more rapid pace of economic and technological change but also by the ageing of the population of working age which – all things being equal – will take place throughout the period from now until 2010, or even 2015.

5.3 Ageing of the working population: a European problem

A corollary to the ageing of the working population and of people of working age is the argument in favour of a growing role for employers in lifelong training. As pointed out by Edgar Sauter, this ageing is forcing employers more and more to draw on the pool of older workers. There are many reasons for the ageing of workers in enterprises, in particular the freeze on recruitment following the 1973 recession. Paradoxically, the generation born after 1965 is smaller and slower to enter employment, although in general it is more highly educated than the previous generations. For some time now, partly due to the decline in the birth rate during the second half of the 1960s, the proportion of people over 45 in the working-age population in the European Union has risen. This trend will continue well beyond 2010.

The problem of this ageing of the population of working age is becoming all the more acute as the pace of economic and technological change picks up. The older generations are less highly educated than the younger. This means that they are less able to adapt to change and have to make far more effort to adapt or retrain. This is the reason for the

popularity of jettisoning ballast and for measures to lower the pensionable age and persuade people to take early retirement. But these policies are socially expensive, and it will be the younger generations who are likely to bear the cost of early retirement and pensions. As a result, there is an urgent need for a policy on lifelong training if we are not to be handicapped by the obsolescence and devaluation of the knowledge and skills of the older generations.

5.4 The parallel rise of demands and responsibilities

Training has long been a field of peaceful cooperation between the social partners, and has been one of the issues on which fruitful debate at the European level has been possible. Today, however, demands for training are proliferating. Social movements and unions have become aware of the need to look beyond the right to basic education and define a right to continuing training and to promoting the conditions for the exercise of that right. This is the reason for the demands for knowledge and skills audits to allow better guidance of workers and more appropriate training choices. It is also the reason for the claims for more flexible working hours and for setting up methods of funding periods of apprenticeship and training, as well as for evaluation of the results and achievements on completion of training or apprenticeship.

This right to continuing training evidently has its reverse side for the worker, the unemployed person or the jobseeker: in the longer run, it will imply an obligation to train oneself or to continue to train oneself. Furthermore, recognition of a right to continuing training will have implications not only for governments but also for companies which, whether they want to or not, are going to have to invest in the development of lifelong training. But this right to continuing training, which may guarantee the employability of workers, in the words of Alain Dumont, does not imply that the worker will thereafter be guaranteed a job. This was echoed by many of the speakers. The events at Renault in Belgium, whose workers were among the most productive in the group, are evidence of this.

6. Logistic functions and prerequisites in the development of the employer's training role

In the second AGORA, apart from justification of the employers' role in the lifelong training of workers, various questions were discussed on the realistic possibility of employers developing and effectively performing this role. They included points on the less desirable effects of employers taking on and conducting that role. The responses to those questions reflected a range of opinions, some of them against. In theory the proper management of cognitive resources within an organization entails various steps. First of all, the evolution of the range of competences that will be needed over the longer term in different working situations has to be predicted. Secondly, it calls for an evaluation of the existing knowledge and capabilities of workers, as well as their potential (their ability to learn, make progress or change). This also means that the existing and even probable shortcomings among the workers who will be exposed to change must be identified. This often calls for applicants to be screened in the light of their trainability. Thirdly, the best methods of bridging the gap between existing and future competences must be determined. Fourthly, it may be necessary to evaluate the results of learning and training and to assess what has been acquired.

Ideally, then, in the development of human resources in the workplace the employer should predict the competences needed, draw up skills audits, select people for training on the basis of the observable gaps, decide on guidelines for and the sequences of learning and training and finally develop a process of evaluating progress or the skills acquired. A number of questions arise at each step. For example, the extent to which an employer can predict the competences needed should be recognized, and a decision taken on how far the workforce needs to be involved in this definition of the needs and also in the choice of people who will be required to train. This then raises the question of whether it is preferable to train inside or outside the workplace. Should training be evaluated? Should what has been acquired be recognized in the form of higher earnings, or be certified? Another question to be considered is whether this should be done by the enterprise itself or through outside bodies. The replies to such questions are of crucial importance to workers and their commitment to their employer and to training.

6.1 Doubts as to employers' ability to predict the future

The experts discussed at length the predictability of skill requirements and the ability of employers to plan for the necessary development of human resources, both quantitative and qualitative. They debated the employer's actual ability to make medium- and long-term forecasts of the cognitive skills, qualities and practical abilities that will be required, or the behavioural and social abilities and attitudes desirable in the workforce and management. Although the issue was of strategic importance, the experts were unable to reach a consensus. Their ambivalence was about not so much the usefulness of such forecasts as the possibility and manner of arriving at them.

Throughout the discussion the aim was to determine the extent to which - and the conditions under which - long-term forecasts could be established and training programmes designed so that the requisite skills would be available in the future. In the light of contributions by Manfred Hase, it appeared that in large companies, in the car manufacturing industry for example, such forecasting and planning are routine. On the other hand, according to Blanca Gomez, such measures are non-existent in small and medium-sized firms, most of which seemed neither able nor willing to organize training themselves. Moreover, large companies to links with SMEs do not pay too much attention to what their suppliers or sub-contractors are or are not doing by way of training.

In this discussion on the predictability of requirements, it was shown that workers realize their shortcomings on a day-to-day basis. According to Uwe Grünewald, Manfred Hase, Edgar Sauter, Heikki Suomainen and Reinhold Weiss, employers are able to recognize these inadequacies by various means: through evaluations conducted by management, staff, individual discussions in order to identify needs and evaluate progress, or skills audits, quality circles, project or creativity groups, etc. But, argued Manfred Hase, these are approaches to identifying short- or medium-term needs. The primary purpose of the plans for training that ensue is to solve immediate, practical problems of production and work. According to Reinhold Weiss, forecasts for the next three or four years are hard to establish. Philippe Defoin said that the demand for training tends to arise more from employers than from workers, or else from consultation between them and with outside consultants who, in the light of visits to the workplace, help to formulate the demand for training. This poses the question of who defines the shortcomings and the training needs and on what basis: skills audits, group discussions, negotiations with representative

unions? But also of the extent to which workers' expectations and aspirations are taken into account in the planning and choice of training.

In the end it was accepted that the difficulties in looking ahead vary from sector to sector, from company to company, from one activity or product to another. For instance, there is probably more chance of predicting the future accurately in industrial activities that follow precise technical lines than in certain service sectors that are affected by variations that are hard to foresee and perhaps cannot be controlled, as in banking and finance or in the cultural sectors. Some concerns, furthermore, operate on export markets; others are in sheltered sectors. Some operate on volatile markets, while others – as in the energy industry – meet a demand where the trends are fairly steady, although the opening up of markets may make the future less predictable.

6.2 Recognizing the needs: a responsibility of employers and employees

The discussion demonstrated the need for two paths towards identifying training needs: top-down, from the upper echelons of the concern, the other bottom-up, starting with the needs expressed by the workers. The first follows the management logic of the concern. A company's management cannot wash its hands of the long-term outcome of its activities, including its workforce's skills and the vital development of competences. The other approach reflects the idea that workers are in the service of the enterprise but also have their own plans and individual prospects. This second approach to prediction is based on the workers' own diagnosis as to the gaps in their knowledge and the training they need, either individually or in a group discussion focusing on the subject. By starting at grassroots in defining needs, workers become more motivated in their attitude to training. The existence of the workers' diagnosis of their own competences or shortcomings, their ability to set up guidelines and train for themselves, do not however mean that employers will rely completely on this spontaneous development from the workforce. Nevertheless, the two approaches – one top-down and the other bottom-up - are complementary and the ways in which they can be combined obviously depend on how closely the needs as defined at the top and at grassroots match. Usually such definitions need to be compared. This comparison may then lead to negotiation and consultation on training programmes to ensure that the employer's interests are more closely aligned with the workforce's expectations and aspirations.

Certain companies have already gone a long way towards taking workers' aspirations into consideration. Not only do they have faith in the workers' ability to diagnose their training needs but they also feel that their workers have the ability to map out guidelines and to train themselves; in consequence, the companies set up internal self-teaching and self-training centres, besides providing the staff, resources and equipment. Other companies have gone even further and are offering hardware and general and training software that their workers can take home with them, to promote self-learning, possibly even involving the family.

We may, like Peer Kristensen, think that this individualization of training and training choices reflects the more individual approach taken by the employer on other levels: in drawing up tailor-made employment contracts, individual calculations of the amount of earnings, bonuses and various benefits, in personal career paths for the worker within the enterprise. But training 'made to measure' rather than 'off the peg', individual rather than collective, is likely to meet with favour, especially as the worker perceives society as

competitive. Nevertheless, this trend towards individualization may not necessarily be entirely successful. It may lead to monopolizing and holding on to information and restricting the development of collective intelligence and competence that are so vital within an enterprise and in an innovation-centred economy.

6.3 Logistic functions of the development of lifelong training

Economic, scientific, technical, organizational and communications developments are complex and are accelerating. Giving workers adequate training so that they maintain their 'employability' implies the formulation of a training strategy, but this could not be contemplated without the backing of many logistic or ancillary functions. In such a turbulent and uncertain environment, the problem arises of information on the development of occupations and trades.

There is also the problem of the choice of career and training paths by the workers. The functions of information and occupational guidance cannot cease once basic education is completed. Judicious choices are still necessary at the various turning points in a working life. The quality of the choices made then will influence the quality and appropriateness of the occupational path. Given the complexity, diversity and speed of developments and the ever greater demands of companies that are part of ever wider networks of outside relations, training must continue throughout life but so must guidance, as it is the choice of direction that will determine the choice of training. The effectiveness of training arranged by a company in-house or outsourced, for instance, will call for sound information for workers on current developments, the direction of future work, the kind of training that will fit people for that work, and the chances of success in that training. Furthermore, not everyone needs to, or could, learn the same thing, except in the case of foundation learning before one or more specific training courses are taken.

This means, then, that lifelong training cannot be conceived in isolation from lifelong guidance. The functions for which the guidance bodies are responsible include the provision of information and advice on the choice of direction and training or even location in the case of occupational mobility. The effectiveness of training also depends on providing support to workers in the process of occupational adaptation, retraining or mobility. These are the logistic and ancillary functions for training. Like training, they can be developed both within the enterprise and outside, but also in liaison with bodies inside and outside the workplace. Going outside the company is becoming increasingly common, since a company cannot monitor everything and do everything properly, especially as each of these functions entails costs that the employer does not necessarily wish to cover.

6.4 Towards a proper balance of internal and external training

In the AGORA, we refused to see the issue as merely the competing claims of different methods of apprenticeship and training, in other words whether training is organized on the job, within the workplace or out-of-house or whether or not it is initiated at the request of the workers. Today, there is a wide range of communication networks and sources of information and training inside and outside the workplace. The experts felt that internal and external approaches are, or should be, cumulative and complementary. They did not, however, reach a consensus on the trends: some felt that training is becoming increasingly internalized. This was the view held by the more northerly countries of the

European Union. They based that view in particular on the growing specialization of companies, production and products, but also – like Edgar Sauter – on the quality or even the superiority of training integrated into work and the workplace. Experts from further south – the French and Belgians, for example thought that there is ever more frequent recourse to outside facilities. Joint training is being developed within sectors of activity, in collaboration with workers' organizations. This is happening in Belgium, as reported by Philippe Defoin.

More fundamentally, however, the experts failed to agree on the importance attached to training and the training effects of work in enterprises that have adopted the new forms of work organization. Some, in common with Peer H. Kristensen, considered that the new forms of organization – customer-centred, deadline-oriented, 'just-in-time', quality-led, etc. – correspondingly reduce the time devoted to training. In such circumstances, workers are usually expected to try on the job to solve their work-related problems or problems arising from their internal and also external relations. The training times are all the shorter in that workplaces are networked and part of a network of networks. Through Intranet and Internet, companies are increasingly networked both internally and with other companies.

Other experts, in contrast, believed that low growth rates and ever keener competition are forcing enterprises, whether independent or sub-contractors, small, medium-sized or large, to shift the focus back to their specialities. The result is that the skill requirements are becoming more specific, in common with the training or learning. Such training is preferably promoted through groups, which may be horizontal (work groups), vertical (command groups) or transversal (running across several levels and departments), or perhaps what have been called progress, quality or project groups. Nevertheless, this recourse to collective intelligence within discussion groups does not exclude recourse to outside facilities for targeted training, designed to fill what are identified as the gaps in the knowledge of individuals or groups.

In parallel to these groups, the continuous communication networks set up among enterprises and the development of Internet are creating facilities for broader exchange of knowledge and expertise among individuals in the network of enterprises. They are also multiplying the opportunities for instructive dialogues, including dialogue with people outside the network. Various enterprises, especially the large companies, feel that the short- and long-term management of human resources is a central and strategic function. Training services there operate full-time. Generally they are reserved for the company's own use, but on occasion they may be made available to customer companies or concerns close to a company.

It should not be concluded, however, that the tendency is to develop internal training. At the same time training is also being externalized, in line with the development of an information and continuing training market in the service of professionals and companies. There are several factors in the rapid expansion of this external training market. They include the exponential growth in scientific, technical and organizational information, the proliferation of places producing and disseminating knowledge throughout the world, the easier accessibility through high-performance communications and the diversification of methods of access and the channels of distribution and transmission.

Besides the traditional forms of teaching and training characterized by the standardization and recurrence of daytime or evening training courses, an institutional system has been

created that offers tailor-made training audits and courses for employers and workers, in response to the demand or to order. Little by little and in parallel with the new individual or collective mass communication media, workers are discovering the potential of self-training. They can join virtual occupational communities, communities of learners and contributors to fora where they can acquire information and knowledge, discover the sources they can turn to in developing their expertise in response to their needs, motivations and interests generated in their workplace or by their occupational or career concerns. This broad and rapidly expanding training market, some of which seems to be formal and some informal, a market that is constantly changing in line with developments in questions and the debate, serves both individuals and enterprises. The market can be accessed either away from the workplace or under the employer's sponsorship if it takes the initiative in opening it up to its workers. In the future, access from the workplace to a knowledge market undergoing of globalization will be evidence that the workplace is continually importing and installing new knowledge. In view of the facilities available at present, we can see that such access is not limited to large concerns. This is why it is so hard to distinguish between the inside and the outside of an enterprise, between internal and external training. It has led to ambivalence when we try to discuss the tendency to internalize or externalize training. It is also leading to a search for good methods of structuring and breaking down the different internal and external training channels.

6.5 Promoting individual training and the development of collective intelligence

In the introduction to the second AGORA, the whole of item 6 was devoted to the problem of discovering and stimulating collective competences. Due to lack of time, this topic was only just touched on, despite the importance that the rapporteur attached to it from the start. Even so, the experts were aware of the strategic nature of collective competence and intelligence. Alain Dumont even pointed out the need for the employer to find ways of remunerating and rewarding the stimulation and exercise of collective intelligence and group performance, notably by collective recompense.

To wind up the discussions, it would be hard not to set out a few additional thoughts in an effort to understand the strategic issue of developing collective intelligence in a cognitive society. Our developed societies are characterized by a build-up in a whole range of 'leading-edge services'. Substantial proportions of such services are those that we call 'services to companies'. They generally include the leading tertiary sectors such as finance, insurance, property, consultancy, legal support, advertising, industrial design, marketing, public relations, security, information search, information and communication management systems, research and scientific development.

But the stimulation and use of collective intelligence are processes and policies that would be of value in other sectors of activity as well. Collective competence is a factor in all collective activities, whether agriculture, industry or the tertiary sector. Its use would be the source of what some people have called 'new productivity'. In reality, individual competences that can be exercised independently of other skills and other people's competence are fairly rare, except perhaps in the arts. The exercise of a skill does not simply follow on from the development of that skill. Competence does not really exist unless one has the ability to put it into practice, and this usually depends on practical discussion or working situations. For instance, the implementation of knowledge and skills, whether theoretical or practical, depends on those possessed by one's associates. It assumes the pooling of people and what they do, but also of their intelligence. Knowledge

or expertise is generally assimilated individually, but its effective use often entails association with others, with a work group, with a collective body without which an individual could do little. Without minimal collective intelligence, individual performance remains limited. Furthermore, competences within enterprises, whether work-related or social, are never simply personal and one-off. They are also collective and can be acquired collectively. Training itself is not just an individual process, but also a collective approach.

Even today, despite the development of self-training and self-teaching, training is still a collective process, a group activity whose effectiveness depends on the group. The quality of learning and training, like the quality of work in the enterprise, arise both from workers' individual and collective competences.

Lastly, it is undeniable that current trends are leading employers to develop an active and positive internal economy of the creation and mobilization of competences. Growing communications within and between enterprises are contributing to this. Through the networking of communications within the workplace, through wholescale interconnections and networking, we are witnessing a 'second cerebralization' – one developing beyond the interconnections among the neurons in the human brain, the connections established among not just those people close by but also people at a distance. In the workplace, willingly or reluctantly, individual competences are being used in working groups whose effectiveness depends on the quality and competence of all the people with whom each worker is associated. Within groups or regroupings, both spontaneous and those created by the employer, relations and affinities, and exchanges are formed and thereby a form of collective intelligence. It is this collective intelligence that ensures that working groups know and can do more than what each of their members know and do. In the enterprise, collective intelligence is developed through the multiplication of relations and communications. These promote the distribution and circulation of information, but also of knowledge and expertise, and then their hybridization.

Today, workforces include a growing number of people who have undergone lengthy school education. It is only normal that this will increase their ability to learn and make it easier for them to adapt to the changing requirements of organizations - especially as these more highly educated workers and operators are more likely to seek out new information and knowledge from various sources, both inside and outside the workplace. The consequence is that each person within an enterprise often knows more than might be imagined, and knows things that could be useful to a work or quality or project group. This is the reason for the employer's efforts to multiply the number of such groups and stimulate worker participation. It is often by such means that collective intelligence can successfully be promoted. The intelligence is most likely to be manifested in ad hoc groups, because these are the fora for the pooling of information, knowledge and competence. Groups are the places in which problems and ideas are expressed, defined, explored and discussed, where imagination, creation and innovation may develop. They are the places in which solutions are devised, assessed and chosen, where the results of implementing those results are evaluated.

In discussing the function of those groups, however, some of the experts pointed out how employers seek to use the groups to confiscate knowledge and expertise for their own benefit. No doubt this is so, but this in no way eliminates the need to stimulate collective intelligence and competence in the enterprise. This aim also reveals the importance

assumed by 'in situ' and 'in vivo' training in comparison with outside training, which only makes sense if the competences to be acquired are not those already or potentially used in the practical situations encountered in the workplace.

In the same way, the desire to develop collective intelligence is a reason for employers stressing the development of 'made to measure' and group training programmes rather than standard packaged courses offered by the traditional training establishments. Nowadays, in any case, employers do not seek just to promote the individual capitalization of knowledge and expertise, and therefore the development of individual competences, but also to encourage the development of collective intelligence. In extreme cases, over-individualization and over-specialization can be dangerous or lead to monopolization or even retention.

An enterprise may operate a 'just-in-time' management system or a productivity system interlinking its procurement, production and marketing circuits plus any links that can be developed through information and communication media working alongside or duplicating those circuits, or a system based on rapid reprogramming and innovation in response to customer orders and expectations. In such cases, the enterprise depends not only on its ability to react individually to problems, challenges, contingencies and incidents but also on its collective intelligence, and therefore its ability to promote that collective intelligence within a working community.

Like individual competences, collective competence is developed through many channels. This means that the quality of the workplace environment will determine how this collective intelligence will be used. In some cases this will work in favour of the organization, in others to its detriment. it all depends on whether an attitude of consensus or opposition builds up in the enterprise. This is why new workplace cultures are making their appearance, centring on the development of group dynamics through the quest for quality, innovation, knowledge and expertise.

But how should we approach, acquire, develop and evaluate this collective intelligence? How should it be rewarded? Unfortunately the AGORA was unable to find a reply to these questions. Nevertheless, the experts recognized the importance of developing collective intelligence and the impetus provided by interconnections not just within the workplace but outside.

6.6 Training platforms

Just because an employer wishes to assume a training role does not mean that it will conduct the training itself. Quite the contrary: it is not unusual for training to be outsourced, for example using equipment suppliers or conducting it on the principals' premises or commissioning it from external training agencies offering their services to companies. The provision of training for workers and companies is an area of rapid expansion. This outsourcing may be all the more necessary as not all enterprises are capable of developing lifelong training themselves. Small and medium-sized enterprises are often apprehensive when faced by the demand on their time and budget imposed by training. This is why in some cases employers contemplate joining with others operating in the same field or industry or locality to arrange for continuing training.

One of the most important questions raised at the second AGORA THESSALONIKIS was the restructuring of training fora serving networks of enterprises. The size of such enterprises may differ widely, just as they may differ in their inclination to develop training. It goes without saying that the choice of an external training supplier is of particular concern to the smaller concern. Training may be developed either at the level of a sector of activity or on a regional or perhaps local level, in either case covering a given industry or group of industries. At this level, the 'employment catchment area' concept used in France may be a useful formula for the organization of continuing training.

The AGORA did not cover fully the question of choosing a platform for the management of training in the service of enterprises that are not all able to provide lifelong training, or to provide it on their own, even though all of them have a role to perform. But the choice of a platform does not mean that certain questions of training at levels other than the enterprise or catchment area can be avoided, for example the certification of knowledge. Apart from national certification, it could perhaps be recognized or validated at European Union level.

6.7 Looking beyond the recognition of achievements, the need for formal validation and certification

Formal validation and, beyond that, the certification of abilities and competence are primarily of value to the worker aspiring to promotion or to any other form of mobility within or outside the enterprise. From the worker's viewpoint, workplace certification of apprenticeship or training and the confirmation of this certification by an official and competent outside body are in themselves a recognition of and reward for effort and for the results achieved. Be that as it may, if the aim is to stimulate an increase in competences and the acquisition of experience and knowledge throughout one's working life, it must be possible to provide some sort of validation: greater social status, promotion on an occupational group or hierarchy, higher earnings or greater potential geographical and job mobility. A true incentive to continuing training implies official recognition of achievement, even if this is not of particular concern to the employer, except at specific junctures – for example, if it wants to downsize and arrange for the 'outplacement' of its workers.

The validation and certification of achievement were the subject of detailed discussion at the AGORA. Those present benefited from the expertise and work of Jens Bjørnåvold, specifically tasked by CEDEFOP with developing comparative analyses in these fields. The debate highlighted the extent of the challenges posed by validation and certification. These are not only a worker's passport to job mobility but may offer access to more training, inside or outside the workplace, since diplomas and previous attendance of courses are usually regarded as advantages in deciding access to training. On the other hand, where failure at school or in training has lessened a worker's chances of self-improvement, certification becomes a vital asset. This is particularly true of someone who has not had the opportunity to acquire a diploma at the end of initial training, because for various reasons he has been unable to continue or succeed in his studies or because, in the absence of certificates, he has been unable to obtain a second chance in the traditional training and qualification system.

The non-validation or non-certification of training or achievement is something that particularly affects lower-skilled workers and those who have failed at school. Lifelong

training will be effective for such workers only if their access to further training is not blocked by weaknesses in their diplomas or basic education. These are handicaps that may well be greater for the older generations, who generally have less school education.

Besides the question of what is to be validated – an apprenticeship, ability in a working situation, knowledge, interpersonal skills, initiative, the worker's ingenuity or creativity – there is the problem of the means of validating all this, and the level at which it is done. The skills audits established inside or outside the workplace by independent bodies, whether or not they come under the auspices of the social partners, could be one way of certification. An official logbook might be issued to the worker, for use when he applies for a new position or job. On this subject, mention was made of the UK system of certifying qualifications, without it being possible to assess its actual usefulness or practicability.

The validation and certification of knowledge and competence acquired, theoretical or practical, does not however always have the effects desired by workers. Everything depends on the general application, transferability or specificity of the knowledge and competence transmitted or acquired inside or outside the workplace. Certification is not an absolute guarantee of mobility, especially if the knowledge acquired in one workplace cannot readily be transferred elsewhere, even though it is regarded as targeted. In the discussion the case of petrochemical concerns was cited as an example: the knowledge and skills built up there are substantial, but can rarely be used outside the petrochemical industry. The same may apply to many other sectors, but in our time certain basic knowledge and competences, for instance in information technology, are no doubt the easiest to transfer from one job to another or from one firm to another.

At the AGORA, the debate only touched on the problem of the co-existence of various certification bodies. Nationally, the ministries – not just the Education Ministry but also those responsible for employment, small firms and the self-employed, and on occasions agriculture – are bodies that certify apprenticeship and training. This multiplicity is a problem in itself in that the same qualifications may be certified in different ways depending on the nature of the training and certification bodies, without there necessarily being a recognized equivalence of titles or diplomas. In this context, the certification of lifelong training is very likely to be promoted through the new bodies, but at the risk of not achieving an equivalence between what has been acquired in or outside work, as part of traditional school education or continuing training.

Mention should be made here of the comparative studies of the many different certification systems in individual countries. This is a priority for CEDEFOP, which is developing such studies under the direction of Jens Bjørnåvold. However widely dispersed they may be at present, ultimately it will no doubt be necessary to arrive at the coordination of those certification bodies which, in every European Union country, work on the basis of a smaller or greater number of criteria. It is always the same people who suffer from the discrimination made possible by such dispersion. The absence of coordination among the public and private bodes working on the validation and certification of knowledge and competence of young people and the less young inevitably results in discrimination among workers depending on the bodies that have validated or certified their skills. For example, a person coming from a training centre for the unemployed may not receive the same type of recognition in his work as someone from a normal occupational sector. In Belgium, for example, this is the case with the unemployed and jobseekers trained in centres run by the *Office de l'emploi et de la formation*. Their qualifications are not treated as those same as those conferred in schools and occupational training fora.

Lastly, the outside validation and certification of knowledge and skills acquired in or outside the workplace will become an ever more pressing problem with the proliferation of the channels and informal methods of acquiring them. One example is the knowledge acquired through the computerized learning and courses that may be developed with the support of a virtual community of trainers and learners.

7. The functional links between workplace training and training in a cognitive society, and the balance of power

7.1 Lifelong training: formerly an incidental, now a central, issue

Up to now, continuing vocational training at work and in society has developed without generating any real confrontation or major conflict. In the newly developing knowledge society – or cognitive society, if we opt for the term accepted by the European Commission – training throughout one's working life, perhaps outside one's working life as well, is no longer a marginal or peripheral issue but is gradually becoming a central, strategic challenge in relations between employers and workers within enterprises and sectors of activity, as well as in collective negotiations between the social partners. In coming so much to the fore in personal life and in the life and survival of the enterprise, training has become not just a challenge but also a product, indeed a set of products that can be manufactured and distributed on actual knowledge and training markets.

Within the enterprise, the importance now attached to the management of human resources is due to the shifting of the focus to novelty and innovation, product quality and diversity, and as a result to the continuing adaptation and occupational retraining of the workforce, the production of knowledge and expertise, the constant interplay between information, knowledge and ideas and the changes taking place in the workplace. The training and pooling of knowledge that this promotes will undoubtedly make it all the harder for certain individuals or groups to keep to themselves or monopolize knowledge and expertise in the workplace. This is undoubtedly one of the reasons why managerial staff are not automatically in favour of developing in-house training. As pointed out by Peer Kristensen, workers who become intelligent may overshadow or undermine them.

Since it has become an essential factor in the lives of individuals and enterprises, training is an issue for workers and the various categories of worker. Now that it is so strategic, training arouses interest but also creates a divergence of interests. It leads to action but at the same time to reaction, in that some people find themselves at an advantage and others are adversely affected by training policy.

The problem of in-house training is also a problem of its distribution. Resources are scarce and have to be allotted, and the choices that are made inevitably lead to exclusion. Exclusion is resented all the more keenly if an enterprise is in the midst of change and if the opportunity to train is – as often happens – an indication of the chances of survival and future for a worker or group of workers in the enterprise. Outside, training has become a vital factor on a formidable market, a market of constant growth in which both supply and demand are on the increase. Once training is a vital factor, it generates tension among individuals, categories and working groups, with some rapidly seeing themselves as discriminated against by comparison with others, whom they see as in a favoured

position within the enterprise, and on training markets where a series of criteria promotes access for some people and debars others.

For a time, within the workplace, unions seemed more concerned with preserving what had been won, with protecting trades and qualifications, with demarcation of areas of competence, with enforcing classifications and the corresponding levels of earnings than with multiskilling, adaptability and therefore the training of workers. Today things seem to have gone into reverse, with unions showing greater concern about the problems of lifelong training. One of their declared intentions is to combat all forms of discrimination in training based on age, education and diplomas, nationality and language, gender, status (manual or clerical worker) or the level of managerial staff. They want, if not an equal distribution, at least a balanced distribution of training among workers and different categories of workers. The unions' objective is to make sure that access to the various forms of apprenticeship and training is equitably shared among workers, whether these are self-training, workplace learning, or scheduled courses in an enterprise or commissioned from an outside body.

Unions in fact feel that the employer tends spontaneously to allocate on-the-job, informal and in-house training to the less skilled. On the other hand, the more costly outside training is usually reserved for the more highly skilled workers. The unions then embark on a campaign to ensure that all workers, including the least skilled, are not just put onto very short-term training to learn the skills they immediately need, but rather are included in training geared to longer-term changes in working conditions and management. This is the only type of training that guarantees the employability of workers. Outside the workplace, unions are seeking ways of promoting the right of workers to continuing training. They are acting to ensure that the benefits of such lifelong training are not confined to those who work in medium-sized and large concerns, possibly to the detriment of those who work in small firms.

But the newly awakened union awareness of the training issues does not remove a basic ambiguity. In actual fact, the unions are becoming more and more ambivalent about the balances to be aimed at or discovered in the field of social policies. In the longer run, they cannot evade the need to reflect on the priority that should be attached to policies on the training of the working population and on social policies to help those fringe groups who are not in work.

7.2 The necessary vigilance as to the less fortunate effects of lifelong training

In the enterprise, training comes in the wake of change and is aligned with innovation. The future of the people who work there, but also in society, depends on their opportunities to train. In practice, however, continuing training in the workplace and in a society in a constant process of change can only have beneficial effects and positive functions. This is a point to which Peer Kristensen and Edgar Sauter drew the attention of participants in the AGORA.

In the debate, it was stressed that the fact that the enterprise commits itself to train people throughout their lives implies that it recognizes the adverse and potentially dysfunctional effects of such a policy. The same prudence should be adopted from the union viewpoint. For example, an enterprise that aims to be innovatory and skill-directed will be stimulating for its workers, but can it remain so? If it ceases to innovate, there must be a risk of fast

losing its best people once there is no new challenge to distract them from the boredom that comes from routine. The best trained workers may also be drained away to other enterprises that have not invested in training and are willing to pay what it costs to attract the trained people.

In the same way, multiskilling and training will level the barriers between trades and occupations. They will also flatten the hierarchies in organization and correspondingly reduce the opportunities for promotion to higher levels or grades. But when this happens, employers reduce the incentive to train and perform better.

Lastly, the unions themselves may suffer from the negative effects of workers being trained, or from specific, targeted training. In reality, it is not unusual for workers emancipated through training to become less unionized.

But the management of lifelong training raises many other problems, especially in linking efforts made inside and outside the workplace, between the initiatives and bodies aiming at the development of basic education and those that flourish today in continuing training, and also between employment policies and training policies.

7.3 New forms of synergy between education, training and employment policies: a prerequisite for effective training measures

Ultimately the enterprise can perform its role in lifelong training effectively only if society as a whole is persuaded of the need for it to assume that role, given the ever faster pace of economic, technical, organization and communications change. In the long run, employers can perform a training role only if there are enough jobs available. There is therefore a need for the interlinking of policies on training, guidance and employment. There must be liaison between the bodies operating in the field of vocational guidance and the training bodies that are trying to develop the competences demanded by employers, both occupational and social.

Various speakers pointed out that unemployment is lowest in those countries that have realized the importance of such functions and structuring, such as Germany, the United Kingdom and Denmark. This points to the value of stimulating both public- and private-sector enterprises to accept their responsibilities in the fields of employment, employment prediction, apprenticeship and training. This mobilization of enterprises and society in general as regards education, training and employment implies an attempt to determine how best we can develop synergy between policies on basic education and on continuing vocational training, between employment and training policies and therefore between policies and development policies as a whole.

The effectiveness of policy on continuing training in and outside the workplace must thus be sought in structuring and creating synergy among enterprises, training centres and establishments engaged in basic training, inspired and instigated by the joint negotiation bodies and fora. This quest for synergy will at the same time contribute towards improving the way the labour-market operates. Through job rotation, sequenced learning or the greater continuity of vocational training courses, employers can no doubt guarantee employability, but they cannot give a guarantee of retaining a person in employment, as many speakers reminded us.

In the longer run, the effectiveness of measures to develop continuing vocational training depends on the available or potential jobs and on the proper guidance of training actions

and those being trained. Faced with growth, where the aim is to economize on the number employed rather than on capital invested, it is necessary but not enough to ensure that 'employability' is maintained. Such efforts will be fruitless unless at the same time there are attempts to expand the volume of employment. A policy under which the sole obligation as to results is 'employability' rather than employment would satisfy neither an apprentice nor a person being trained. Unemployed workers are, moreover, right in regarding training as of value only if it leads to a job and employment.

In practice, training policy will be effective only if an investment policy, an industrial policy, a policy on research and development and, of course, a policy on employment for all are developed in parallel and in a coordinated manner. This is why claims for twinned training and employment and the alignment of policies on basic and continuing training and employment policies are so important. Such twinning is needed not just because of the ever faster flow of information in the structures of activity or employment, nor because the number of jobs falls short of the number of people of working age. It is also justified by the need for adequate matching of the occupational aspirations of individuals and the expansion of employment in society, between the choice of directions and the outlets. Little by little, people are coming to realize that this coordination and structuring of policies should ideally take shape within the countries that are members of the European Union.

7.4 The knotty problems of financing training in and outside the workplace

Although the funding of training was not tackled head on during the discussion, it is a strategic issue, especially as the method of funding may well have side effects. This was clearly shown by Alain Dumont as regards France, where certain employers are quite happy to transfer the percentage deduction from wages that is earmarked for training to a common training fund, and then feel themselves to have no further responsibility for the problem of continuing training.

In view of its importance, this subject does however call for a little thought, especially as CEDEFOP has developed a work programme on an international comparison of the methods of funding continuing training. This programme is all the more important and urgent in that funding procedures differ very widely from one country to another. First of all, a distinction should be made between two problems. On the one hand, there is the financing of training and therefore of training agencies and the trainers. On the other, there is the question of funding workers undergoing apprenticeship or training, and in particular the loss of earnings and hourly credits. Along the same lines is the problem of sharing the costs among the employer, worker and authorities. Another is whether it is better to fund the worker by means of training vouchers, or just the training agencies. Another problem is that of the number of hours and the periods of release for lifelong training.

As in many other fields at European level, the procedures for the funding of continuing vocational training differ very widely. In some countries, there is substantial reliance on the workplace, as in Germany. In others, the burden is on outside bodies, as in Belgium, where there is no particular encouragement for companies to finance training except to the extent that they finance the 'credits' of time off for training. This system is designed for workers who go outside the workplace for their occupational studies. It may cover loss of earnings over a few days' work a year. In France, employers are taxed on the basis of a given percentage of their wage bills, but the proceeds do not have to be paid into the common fund if the employer itself devotes that amount to training its own workers.

Of the many ideas in circulation today and the many problems of financing lifelong training, there is the proposal to grant all workers a 'training period investment credit' equivalent to a number of years of their working lives. This capital, i.e. a certain time that they are free to invest in training, could be divided into sabbatical quarters, half-years or years. It cold be financed in the same way as pension funds and, like them, be derived from contributions levied on workers and their employers in proportion to their earnings. Such capital would make life more secure for a worker who is likely to change his occupation several times in the course of his life, or one who wishes to acquire new knowledge that can be put to good use in his working life. The availability of such capital would help to establish a true right for workers to lifelong training. Without such capital, it would be very hard for him to keep abreast of the changes taking place in knowledge, expertise and behavioural attitudes required in the course of his working life.

The problem then is how to finance the organization of studies or training. Here again, there may be two solutions. Either the employer pays because it views the training being undertaken by the worker as useful or profitable, or it is the worker who pays or receives training vouchers so that he can fund the institution where he wishes to study or train. Obviously, such solutions are of greater interest to workers in small and medium-sized enterprises, which up to now have been discriminated against as regards lifelong training.

The availability of such training time capital and of training vouchers enables the worker to progress independently and to individualize the worker's responsibilities for training. The problems could be the subject of reflection for the social partners at the European level as well as research within CEDEFOP. They would then be an extension of the debate launched by its director, Johan van Rens, in his address to the second AGORA.

CEDEFOP – European Centre for the Development of Vocational Training

AGORA — II
'The role of the company in lifelong learning'
Thessaloniki, 17 and 18 November 1997

Jordi Planas
Project coordinator, CEDEFOP

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The main aim of the AGORA THESSALONIKIS is to create a forum for open, multilateral discussion in order to provide technical and scientific support for the decisions and negotiations on vocational training which involve the various partners (Commission, and social and governmental partners) within the European framework.

The theme of the seminar was: 'The role of the company in lifelong learning'.

Discussions developed from an introductory memo which is attached to this booklet. It was drafted on the basis of the CEDEFOP survey, under the responsibility of Professor Jacques Delcourt, co-director of the project.

During the introduction the other invited experts gave their opinions on the questions up for discussion, in order to provide an overview of the various approaches to the subject. Their presentations, drafted after the discussions, are also included in this brochure under the following titles:

- *Paradoxes and pitfalls in strategies of continuous training*
  Peer H. Kristensen (Copenhagen Business School Institut for Organisation og Arbejdssociologi København, Denmark)
- *The risks and opportunities of learning on the job*
  Edgar Sauter (BIBB - Bundesinstitut für Berufsbildung Berlin, Deutschland)
- *French training system: reflections*
  Alain Dumont (CNPF - Conseil National du Patronat Français - Direction de la Formation - Paris, France)
- *Continuing training: 'A conflict and a solution'*
  Blanca Gomez (CC.OO - Comisiones Obreras - Secretaria de Formación, Madrid, España)

Finally, the last chapter of this booklet, which is entitled 'Conclusions and the debate so far', aims at summing up the discussions which took place during the sessions of the seminar.

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